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Custer National Forest, noxious weed treatment program
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Custer National Forest

noxious weed treatment program

FINAL Environmental Impact Statement

May 1986

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This document serves as the Final Environmental Impact Statement for the Noxious Weed Treatment Program for the Custer National Forest. It is formatted as an errata sheet to the Draft Environmental Impact Statement (for the same program), issued in February, 1986. Aside from technical clarifications, oversights and typographical errors, there are several new sections added and an additional chapter, Chapter VII —Public Comments Received. You will be able to correlate this errata sheet, page by page, with the Draft document. If you no longer have a copy of the Draft Environmental Impact Statement, you may obtain one by written or verbal request to:

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Custer National Forest
2602 1st Avenue North
P.O. Box 2556
Billings, Montana 59103
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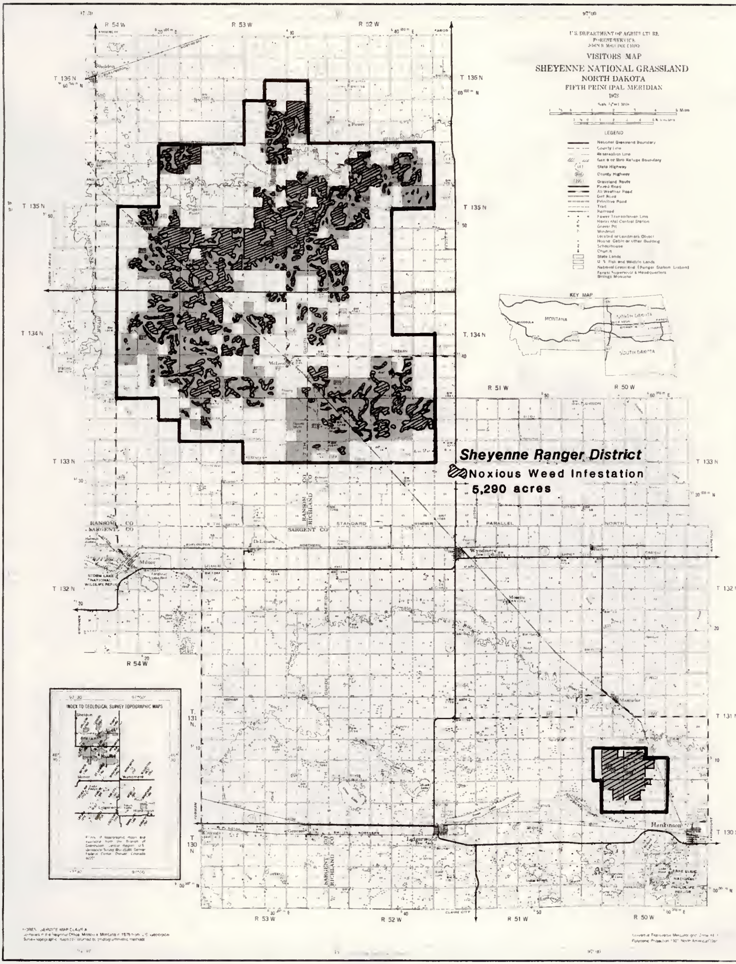
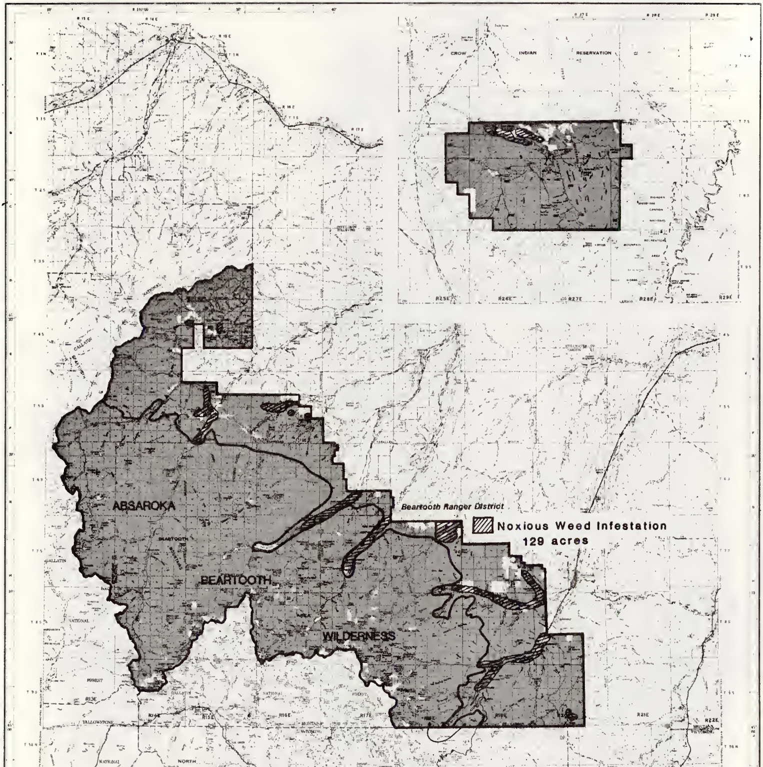
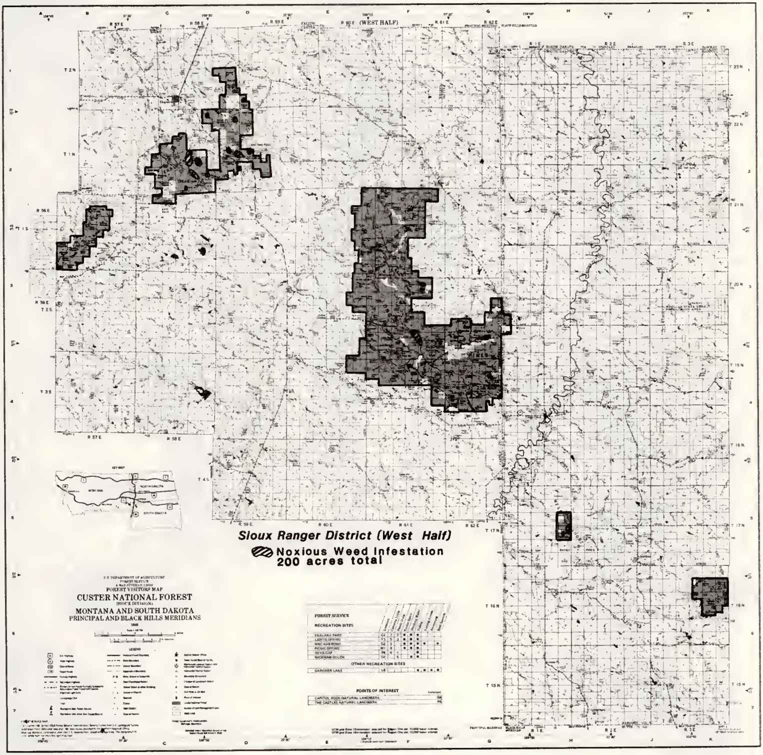
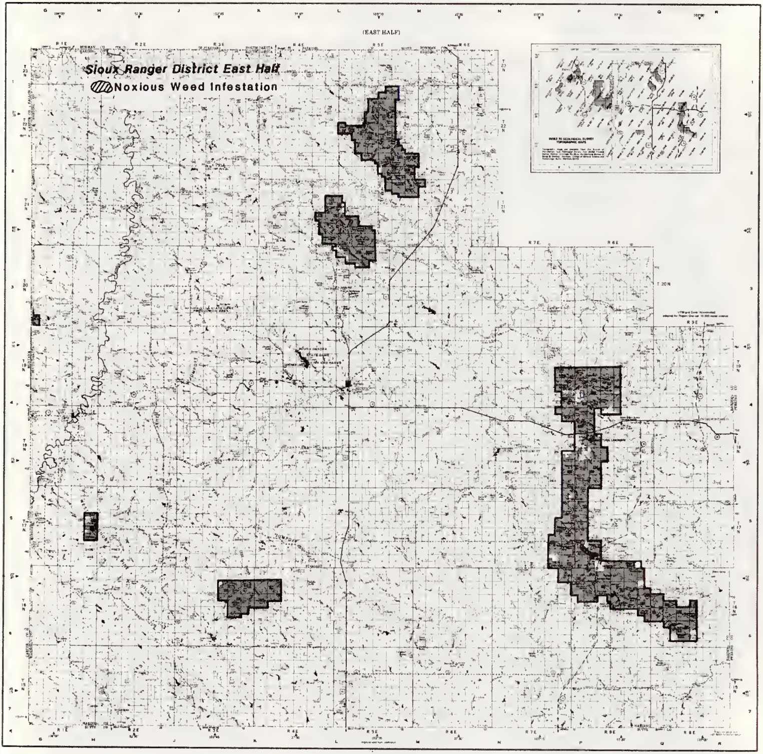

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
VISITORS MAP
SHEYENNE NATIONAL GRASSLAND
NORTH DAKOTA
FIFTH PRINCIPAL MERIDIAN
1978
LEGEND
KEY MAP
MONTANA
NORTH DAKOTA
SOUTH DAKOTA
Sheyenne Ranger District
Noxious Weed Infestation
5,290 acres
R 54 W
R 53 W
R 52 W
R 51 W
R 50 W
T 136 N
T 135 N
T 134 N
T 133 N
T 132 N
T 131 N
T 130 N
RANSOM CO
SARGENT CO
RICHLAND
Wyndmere
Milnor
Lidgerwood
Hankinson
Sheldon
McLeod
INDEX TO GEOLOGICAL SURVEY TOPOGRAPHIC MAPS

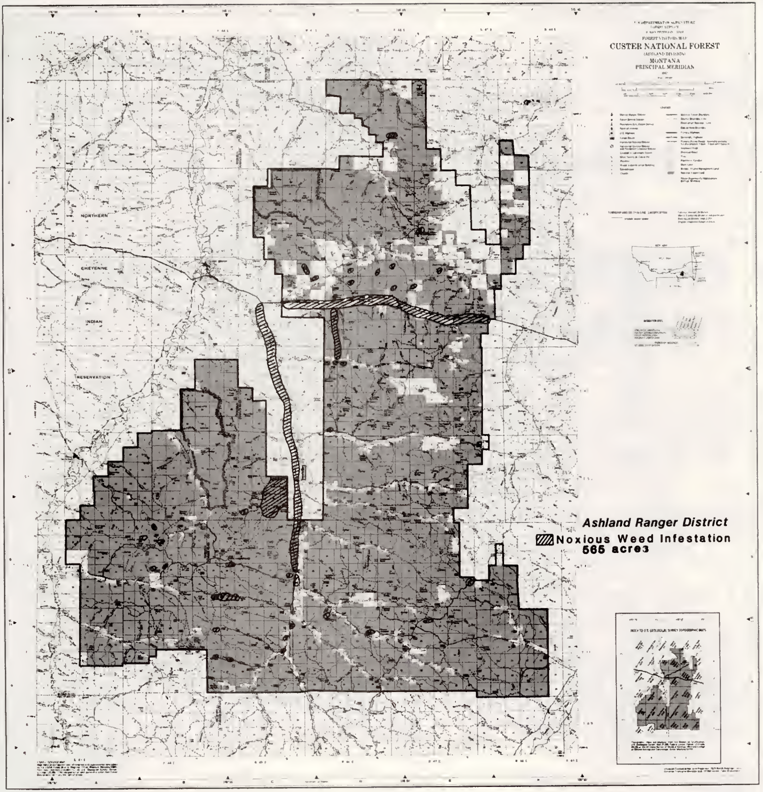

CROW
INDIAN
RESERVATION
ABSAROKA
BEARTOOTH
WILDERNESS
Beartooth Ranger District
▨ Noxious Weed Infestation
129 acres
GALLATIN
NATIONAL
FOREST
MONTANA
WYOMING
NORTH
ABSAROKA
WILDERNESS
SHOSHONE
NATIONAL
FOREST
R13E
R14E
R15E
R16E
R17E
R21E
R22E
R25E
R26E
R27E
R28E
R29E

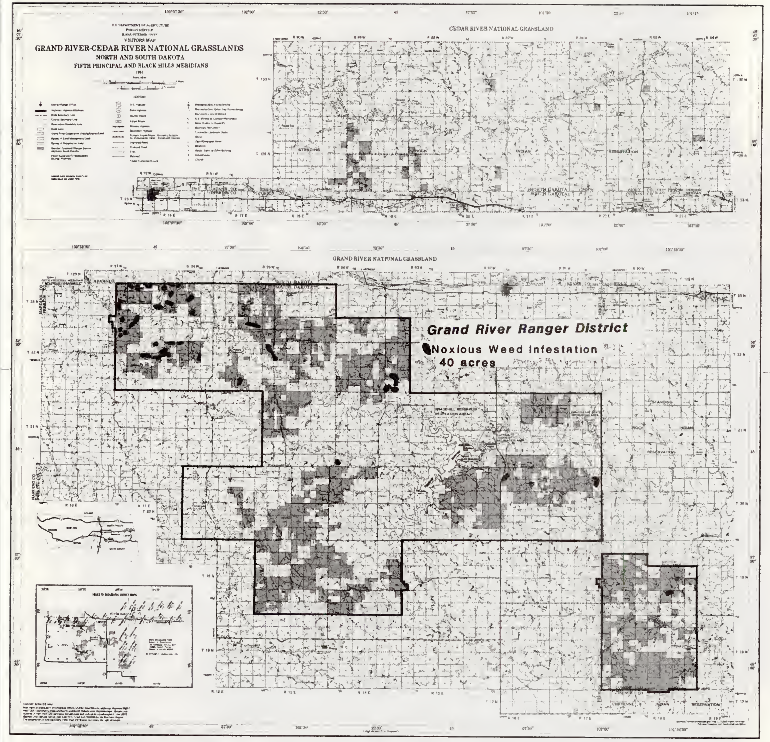


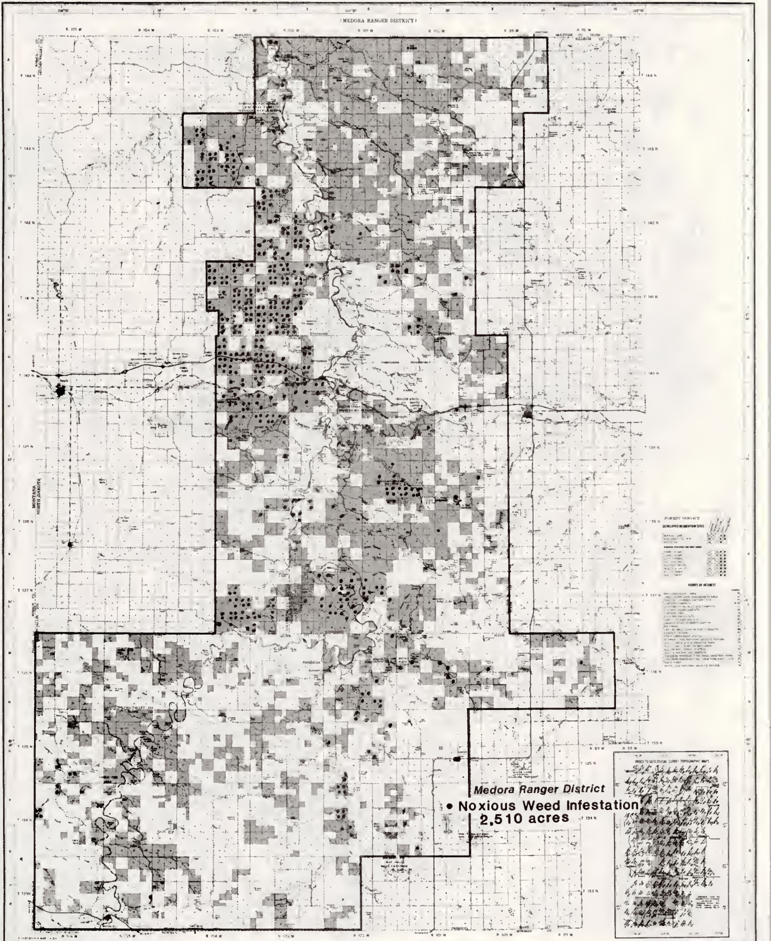
Sioux Ranger District (West Half)

▨ Noxious Weed Infestation
200 acres total


(EAST HALF)
Sioux Ranger District East Half
▨ Noxious Weed Infestation

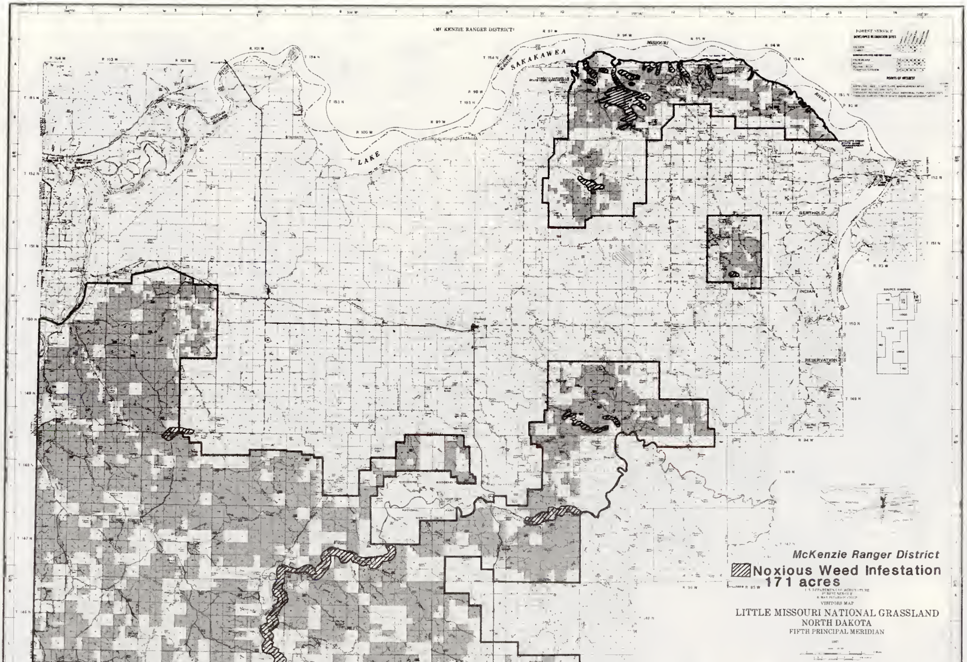

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
FOREST VISITORS MAP
CUSTER NATIONAL FOREST
(ASHLAND DIVISION)
MONTANA
PRINCIPAL MERIDIAN
NORTHERN
CHEYENNE
INDIAN
RESERVATION
Ashland Ranger District
▨ Noxious Weed Infestation
565 acres


U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
VISITORS MAP
GRAND RIVER-CEDAR RIVER NATIONAL GRASSLANDS
NORTH AND SOUTH DAKOTA
FIFTH PRINCIPAL AND BLACK HILLS MERIDIANS
CEDAR RIVER NATIONAL GRASSLAND
STANDING
ROCK
INDIAN
RESERVATION
NORTH DAKOTA
SOUTH DAKOTA
GRAND RIVER NATIONAL GRASSLAND
Grand River Ranger District
●Noxious Weed Infestation
40 acres
SHADEHILL RESERVOIR RECREATION AREA
CHEYENNE
INDIAN
RESERVATION
HARDING CO
PERKINS CO
ADAMS CO



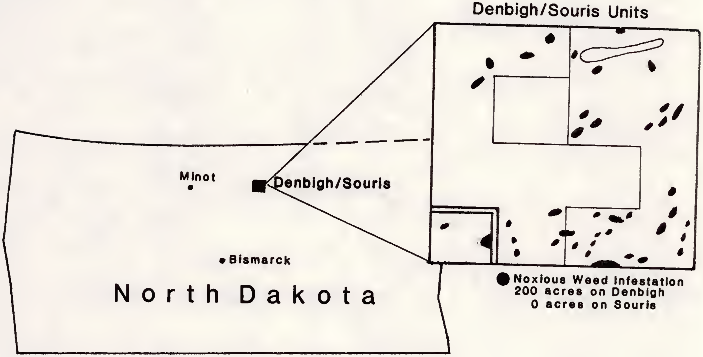
Medora Ranger District

● Noxious Weed Infestation
2,510 acres


(MC KENZIE RANGER DISTRICT)
LAKE
SAKAKAWEA
MISSOURI
RIVER
FORT BERTHOLD
INDIAN
RESERVATION
R 104 W
R 103 W
R 102 W
R 101 W
R 100 W
R 99 W
R 98 W
R 97 W
R 96 W
R 95 W
R 94 W
R 93 W
T 154 N
T 153 N
T 152 N
T 151 N
T 150 N
T 149 N
T 148 N
T 147 N
T 146 N
T 145 N
McKenzie Ranger District
▨ Noxious Weed Infestation
171 acres
U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
VISITORS MAP
LITTLE MISSOURI NATIONAL GRASSLAND
NORTH DAKOTA
FIFTH PRINCIPAL MERIDIAN
LEGEND

Denbigh Experimental Forest

Souris Purchase Unit



Cover Sheet. McHenry County has been added to the list of North Dakota counties.

Page i, right column, paragraph 1. After line 3, the following sentence has been added: The Environmental Assessment analyzing noxious weed treatment in the Red Lodge Municipal Watershed will be completed in 1987.

Page i, right column, paragraph 1, line 4. The phrase "when and if a treatment program is proposed." has been deleted and replaced with "in 1987."

Page i, right column. The following paragraph has been added after paragraph 1:

> When public issues or management concerns have changed or new ones arise, the EIS will be reviewed by the Forest Supervisor. Depending on the significance of the changes, the EIS will be amended or a new EIS will be written. This review would probably occur sometime between 10-15 years after implementation, but could occur sooner.

Page ii, top of right column, Land Status. National Forest Proclaimed Lands acreage has been changed to 1,187,187 acres; Gross Area acreage is now 3,999,679 acres; and Net National Forest System Lands is now 2,227,305 acres.

Page ii, footnote 1, bottom of page. The following sentence has been added: Herbicides can be applied at various application rates typically expressed as pounds (lbs) of active ingredient (AI) per acre (A).

Page iii, right column, paragraph 3, line 1. The word "ester" has been changed to "enter."

Page iii, right column, paragraph 4, line 1. "In areas adjacent to National Forest Systems lands" has been added to line 1.

Page iv, left column, paragraph 7. The following sentence was added at the end of this paragraph to provide information from picloram labels: The picloram label for the states of Montana and South Dakota states; "When spot treating, do not cut grass for feed within 2 weeks after treatment. Meat animals grazing for up to 2 weeks after treatment should be removed from treated areas 3 days prior to slaughter. Do not graze dairy animals on treated areas within 2 weeks after treatment."

Page v, right column, second full paragraph. Lines 3 and 4 have been deleted and replaced with the following sentences: Glyphosate, 2,4-6, and picloram are considered to be carcinogenic and the risk of cancer to workers and to the general public is disclosed in Appendix B. Of all people exposed, workers are most vulnerable to complications from herbicide exposure.

Chapter I

Page 2, Tables I-2 and I-3. These acreages have been updated and the following tables are corrected:

TABLE I-2

ACRES OF NOXIOUS WEEDS ON THE CUSTER NATIONAL FOREST (BY STATE)

Species	Montana	North Dakota	South Dakota	Total
Leafy spurge	123	8,082	62	8,267
Spotted knapweed	648	5	10	663
Canada thistle	46	40	3	89
Hemp	0	40	0	40
Russian knapweed	21	0	8	29
Dalmation toadflax	12	0	0	12
Wormwood	0	10	0	10
Sowthistle	0	2	0	2
St. Johnswort	1	0	0	1
TOTAL	851	8,179	83	9,113

TABLE I-3

ACRES OF NOXIOUS WEEDS ON THE CUSTER NATIONAL FOREST (BY RANGER DISTRICT)

Species	Sheyenne RD	Beartooth RD	Sioux RD	Ashland RD	Grand RD	Medora RD	McKenzie RD	Denbigh Ex. For.	Souris Unit
Leafy spurge	5,241	3	150	0	32	2,500	141	200	0
Spotted knapweed	0	108	40	510	0	5	0	0	0
Canada thistle	5	6	10	33	0	5	30	0	0
Hemp	40	0	0	0	0	0	0	0	0
Russian knapweed	0	0	0	21	8	0	0	0	0
Dalmation toadflax	0	12	0	0	0	0	0	0	0
Wormwood	10	0	0	0	0	0	0	0	0
Sowthistle	2	0	0	0	0	0	0	0	0
St. Johnswort	0	0	0	1	0	0	0	0	0
TOTAL	5,298	129	200	565	40	2,510	171	200	0

Page 3, Land Status under the Vicinity Map. National Forest Proclaimed Lands has been changed to 1,187,187 acres; Gross Area to 3,999,679 acres; and Net National Forest System Lands to 2,447,305 acres. Denbigh Experimental Forest (National Forest) and Souris Purchase Unit (National Forest) have been added to the list of Ranger Districts as 636 acres and 160 acres, respectively. The total acres of the Districts is now 2,447,305.

Page 3, left column, Decisions to be Made. The following sentences have been added after the first paragraph: It is assumed that funding will be available to implement a treatment program. In addition, specific analyses will be developed each year by the individual Ranger Districts for their annual operating plans. The analyses will address specific areas to be treated, type and cost of treatment.

Page 4, left column, first paragraph, line 4. The phrase "when and if a treatment program is proposed for the Absaroka-Beartooth Wilderness." has been deleted and replaced with "in 1987 for the Absaroka-Beartooth Wilderness." After the last line, the following sentence has been added: Any treatment within Management Situation I and II Grizzly Bear habitat will require an additional Biological Assessment.

Page 4, left column. The following paragraph was added after paragraph 1:

> The Red Lodge Municipal Watershed (Beartooth Ranger District) is an area of special consideration. Before any treatment is proposed, further environmental analysis and public involvement will be completed. The analysis will be prepared in 1987 and it will be tiered to this Environmental Impact Statement.

Page 4, left column. Before the ISSUES, CONCERNS, AND OPPORTUNITIES section, a new section titled AMENDMENT AND REVIEW has been added:

AMENDMENT AND REVIEW

> The EIS may be reviewed whenever the Forest Supervisor determines that conditions or isssues and concerns of the public have changed (10-15 years) or when laws, regulations, or policies have changed a review will be conducted.
>
> The Forest Supervisor may amend this Environmental Impact Statement. Based on the analysis of the contents of this EIS, the Forest Supervisor shall determine whether a proposed amendment resulting from a review or a request from the public would result in a significant change in the EIS. In the monitoring and evaluation process, the interdisciplinary team may propose an amendment of the EIS at any time. If a change resulting from the proposed amendment is determined to be significant, the Forest Supervisor shall prepare a new Environmental Impact Statement. If the change resulting from the amendment is determined not to be significant, the Forest Supervisor may implement the amendment following appropriate public notification and satisfactory completion of NEPA procedures. An example of a need for an amendment would be if new effective biological agents become available that are not available now. A situation requiring a new environmental impact statement could be a new and different herbicide being released with environmental consequences or health risks not covered in this document.

Page 4, left column, Issues, Concerns, and Opportunities, issue 5. This item issue is written as follows: The Forest must continue to be "Good Neighbors" by complying with state laws and county regulations and cooperating with forest users.

Page 4, right column, item 3, top of page. After the first line, the following reference has been added: (Pers. Comm. R. Lym, 1986).

Page 4, right column. After the OPPORTUNITIES section, the following section has been added:

SUMMARY OF PUBLIC COMMENTS AND CHANGES BETWEEN DRAFT AND FINAL

> The Forest received 32 comment letters on the Draft Environmental Impact Statement. The statistical breakdown is as follows:

Montana:	13 letters	Individuals:	5
North Dakota:	10 letters	Federal Agency:	6
South Dakota:	6 letters	State Agency:	9
Other State:	3 letters	Local Agency:	1
		Organization:	7
		Education Inst.:	4

> Slightly over half of the respondents voiced explicit support for the Preferred Alternative 4, although nearly all of them had areas of concern and requested clarification. (Chapter VII shows the responses to all of the letters received.) Specific support was given to the program because of the severe problem that noxious weeds were presenting across the rangelands of Montana and North Dakota. The problem is currently less severe in South Dakota, but the respondents from that state urged prompt action to avoid widespread infestations. Support was also provided from wilderness-interested citizens, who feared a spread of noxious weeds into the Absaroka-Beartooth Wilderness. Fewer respondents

implied support for a treatment program without specifically identifying the Preferred Alternative 4. Most suggested changes to address their concerns. Two letters indicated that the EIS was simply not adequate for a number of reasons, such as lack of research on the Custer's lands and lack of economic analysis.

Areas of concerns from many of the letters centered on:

1. The need to identify preventive measures and appropriate manual methods.

2. The need to re-emphasize the utilization of grazing systems to aid in weed control.

3. The need to prepare more economic analysis that compares the cost of the various methods to each other and to the environmental cost of no treatment at all.

4. The need to identify the monitoring measures necessary to assess the success of the program in stemming the spread of noxious weeds.

5. The need to further identify the relationship of noxious weed phenology to land conditions, i.e. opportunistic characteristics of weeds to spread into disturbed land or land in poor condition.

6. The need to reassess the proposal to apply picloram (Tordon) in wooded settings or other herbicides on or near open water.

7. The need to further analyze the impacts of the herbicides on the soil and water quality and to implement research projects on the Custer National Forest.

8. The need to prepare a proposal for treatment of noxious weeds in the Absaroka-Beartooth Wilderness.

Summary of changes between the Draft and Final

The Final Environmental Impact Statement addresses all of these concerns in the appropriate sections of the document. In many cases, there was need for clarification or a correction of an oversight on the part of the Draft EIS. Important changes include: additional preventive measures and clarifying the role of manual methods; limiting the use of the picloram under trees; and eliminating the possibility of introducing herbicide on open water. The relationsbip of grazing systems and noxious weed treatment has been explained with appropriate references. The Forest has committed to preparing a treatment proposal for the Absaroka-Beartooth Wilderness and the Red Lodge Municipal Watershed (West Fork of Rock Creek) in 1987.

A biological assessment for threatened and endangered species has been prepared and transmitted to the U.S. Fish and Wildlife Service. There is "no effect" upon the species or their habitat. A summary of the biological assessment appears in Chapter IV. There are no threatened or endangered plant species within the Custer National Forest, however, there are a number of unique or Category 2 (USFWS classification) plants that have been identified and listed in Appendix H. This appendix was updated based on additional information provided during the public comment period.

Proper handling of the herbicides is required by State laws and the Final adds language requiring the adherence to these laws. There remains some disagreement over the appropriate level of certification for applicators in North Dakota; and to avoid a delay in the implementation of the needed weed treatment program, future arrangements have been made to discuss the issue and reach a common understanding. All parties concerned do agree that applicators of herbicides need to be adequately trained and certified.

Chapter II

Page 6, right column, Alternative 2, last line. The figure "8,900" has been changed to "9113". Alternative 3, last line, "5,280" has been changed to "5,434". "Preferred Alternative" has been added to Alternative 4.

Page 7, left column, first paragraph. The figure "8,900" has been changed to "8,958". Alternative 5, last line, "5,800" has been changed to "5,876". Alternative 6, last line, "8,900" has been changed to "9,073".

Page 7, left column. Table II-1 has been changed as follows:

ACRES TO BE TREATED BY ALTERNATIVE

Alternative	Acres
1	0
2	9,113
3	5,434
4	8,958
5	5,876
6	9,073

Page 8, Table II-3, column three. A footnote designation has been added to Application Rate.

The footnote states: Application rate is expressed as pounds (lbs) of active ingredient (AI) per acre (A).

Page 9, left column. Insert after paragraph 6: Costs per acre of these types of herbicide applications varies with the method of application, current cost of chemical and the type of chemical used. In the mid-1970's, chemical treatments ranged from $16 to $39 per acres across the Northern Region of the Forest Service (of which the Custer National Forest is a part). By the early 1980's, costs had increased significantly, ranging from $34 to $119 per acre for boom spraying, $85 to $170 per acre for hand-held nozzle spraying, and $146 to $230 per acre for backpack sprayings. The lower costs were associated with picloram and 2,4-D chemical and the highest costs with glyphosate.

Page 9, Mechanical Methods, right column, last paragraph, line 1. The words "manual treatments" were added to the mechanical methods of treating noxious weeds.

Page 9, right column, between paragraph 3 and Biological Control. The following paragraphs were added:

> Manual treatments would include grubbing, hoeing and pulling noxious weeds. If an individual or a few plants are observed, pulling the plants would be the most common method used. Hand pulling can be an effective way to control small infestations of noxious weeds for one year. Seed production can be eliminated and regrowth is severely stunted, which will slow the advancing infestation. This method is suited to small patches along waterways where herbicide use is restricted and where seed production must be eliminated to prevent dispersal by water (Montana State University, Aug. 1984). However, because leafy spurge has extensive underground rhizomes as deep as five feet below the surface, it is impractical to fully dig up the plants to prevent resprouting. Eradication of leafy spurge with mechanical methods requires 2 to 3 seasons of intensive cultivation with a duckfoot cultivator 4 inches deep every 21 days during the growing season (Sonder, Leslie, 1969). These treatments have to be repeated annually for an indefinite period. In general, this method does not provide a practical, effective solution to control of the inventoried weed infestations on the Forest.
>
> Costs per acre of these mechanical methods vary with the method selected. The average cost for mechanical methods in the mid-1970's ranged for $50 to $70 in the Northern Region of the Forest Service. Burning is least expensive with cost ranging from $5 to $11 per acre. In the early 1980's, mowing was estimated to cost $65 per acre and tilling at $138 per acre. Manual treatments are the most costly ranging from $35 to $280 per acres. The large variance is due to topography, soils and density of target species.

Page 9, right column, paragraph 4. The phrase "many of the" has been dropped from line 4.

Page 9, right column, paragraph 5. Line 4 has been rewritten as follows: The states of South Dakota, North Dakota, and Montana require an additional review of evidence and a state permit before an agent is released. Line 5 was deleted.

Page 10, left column, Availability of Biocontrol Agents. After line 3, the following sentence has been added: Gall fly is being tested on knapweed and hawkmoth is being tested on leafy spurge.

Page 10, left column, Availability of Biological Agents. At the end of this section, the following section has been added:

> As new effective Biological Control Agents become available they will be used where applicable on the Custer National Forest.

Page 10, right column. The following paragraph has been added after paragraph 4:

> Certain management activities may contribute to the establishment and spreading several noxious weed species. Such activities include road and pipeline construction, mining, oil and gas exploration, timber harvesting, burning, overgrazing, and unintentional introduction of weed seeds by humans or livestock.

Page 11, left column, paragraph 2. The following sentence has been added after the last line of this paragraph: The establishment and spread may be accelerated by ground disturbance caused by activities such as road construction, mining or oil and gas exploration, or inappropriate grazing levels.

Page 11, left column, paragraph 3 in Leafy Spurge section. The following lines have been added between lines 3 and 4:

> The spread of leafy spurge does not appear to be influenced by management related activities, but appears to proliferate under a variety of environmental conditions. Research in leafy spurge has shown correlation between range sites and infestation levels only. It should be noted that the range sites evaluated were classified in good vegetative condition.

After the last line in paragraph 3, add the following sentence: However, scours have been reported in sheep sometimes (USDI, BLM, FEIS, 1985).

Page 11, left column, paragraph 2 in Dalmation Toadflax section. After "ornamental that invades," "grazed and ungrazed" has been added.

Page 12, left column, paragraph 2, line 2. The word "readily" has been deleted. After line 2, the following lines have been added: Spotted knapweed doesn't necessarily need disturbed sited to establish. For example, spotted knapweed was initially imported near Red Lodge around 1970 and has since became established throughout the area on disturbed and undisturbed lands.

Page 12, right column, paragraph 2, line 1. After "in pasture," "(particularly overgrazed pasture)" was added.

Page 13, left column, paragraph 1. The following sentences have been added after the last line:

> Individuals implementing treatment programs will become familiar with the plant species on the "unique" list, so they can identify species on the list. All available maps and/or listings of species locations will be obtained. A walk-through exam in suitable habitats will be conducted before treatment to determine if any "unique" species are present. If any "unique" species are located, informal consultation with the U.S. Fish and Wildlife Service would be initiated to determine how to treat, when to treat, or if the area can be treated.

Page 13, left column, paragraph 3. The following line was added after the last line: Any proposal for treatment within the Absaroka-Beartooth Wilderness will receive further analysis.

Page 13, right column, paragraph 1. After "... following labeling precautions.", the following lines have been added to clarify picloram use:

> Picloram applications will be used in controlled situations on a limited basis. Research specialists will be consulted for application guidelines. Only certified personnel will be authorized for this type of application.

The last line in this paragraph has been deleted and the following lines have been added to clarify concerns of herbicide entering open water:

> There will be no herbicide introduced directly into any open water either surface, standing, running, or water that recharges an underground aquifer. No herbicide treatments will be allowed on areas where surface movement of water from a treated area can run into adjacent streams or ditches, unless a particular herbicide is labeled for such use and is not harmful to the water resource. Herbicide applications will not be allowed during times of precipitation.

Page 13, right column. The following paragraphs have been added between paragraphs 3 and 4:

> State and Federal regulations will be followed when disposing of all herbicide containers.
>
> State and Federal regulation including those pertaining to air pollution will be followed when using fire as a management tool for treating weeds.

Page 13, right column, paragraph 4. The following lines were added after the last sentence to better define how treatment programs will be monitored:

> Noxious Weed Program Monitoring:
>
> 1. The draft Custer National Forest Management Plan states:
>
> (a) 20% of all acres treated annually will be monitored for post-treatment evaluation.
>
> (b) Surface and/or ground water quality will be monitored seasonally on selected streams or areas.
>
> (c) Riparian /woody draws watershed and vegetative condition will be sonitored on a 5-year basis to show any downward trend in watershed condition.
>
> (d) Range condition and trend will be monitored on all range allotments as field work is completed to indicate any downward trend from previous analysis.
>
> 2. The Custer Forest will initiate a proposal to establish a groundwater monitoring system through North Dakota State University. North Dakota State University has expressed an interest in establishing such a monitoring program.

Page 13, right column, paragraph 4. After the monitoring plan paragraph, the following paragraphs were added:

> The potential for noxious weed invasion following approved activities on National Forest lands are analyzed through individual project EAs or EISs. Some examples include hardrock mining operating plans, KV plans for timber sales, and the requirement of certified weed-free seed for reclamation and seeding projects.
>
> Preventive measures to reduce the spread of noxious weeds include internal and external noxious weed education; requirement of weed-free livestock supplements or pelletized feeds for back country use; monitoring of

trailheads (particularly those adjacent to wilderness areas as well as as other recreation use areas within the Forest); and priority treatment of infestations adjacent to wilderness, developed recreation, or back country areas.

Grazing strategies identify season of use, grazing intensity, range improvements, and improvement practices can be developed to assist in the treatment of certain noxious weeds (i.e. Canada thistle) known to be responsive to range condition. Leafy spurge and spotted knapweed (target species on the Custer) have been shown not to be influenced by such strategies (pers. comm. A. Bjugstad, P. Faye, 1986).

Page 15, left column. After the heading "Alternative 4," "Preferred Alternative" was added.

Chapter III

Page 18, IDENTIFICATION OF THE PREFERRED ALTERNATIVE. This section has been abbreviated to only identify Alternative 4 as the Preferred Alternative. The Rationale for the selection of any alternative is provided in the Record of Decision.

Page 19, left column, paragraph 2. 2,445,798 was changed to 2,446,379 acres; 1,185,680 was changed to 1,186,391 acres; and 3,998,756 was changed to 3,999,679 acres to correct errors in acreage.

Page 19, left column, Table III-1. National Forest Proclaimed Lands now reads 1,187,187 acres, Gross Area reads 3,999,679 acres, and Net National Forest System lands reads 2,447,305 acres.

Page 19, right column, paragraph 3, lines 1 and 2. "636 acres" was inserted before "Denbigh Experimental Forest." Currently about 360 acres are planted to trees, not 60 as previously stated.

Page 19, right column, paragraph 4, line 2. The phrase "of the unit" was deleted and "privence" was replaced with "provenance".

Page 24. Table III-3 has been revised to correct for errors in acreage:

Page 29, left column, paragraph 1, first full sentence. 27% has been changed to 24%.

TABLE III-3

ACRES OF NOXIOUS WEEDS ON THE CUSTER NATIONAL FOREST

BY STATE

Species	Montana	North Dakota	South Dakota	Total
Leafy spurge	123	8,082	62	8,267
Spotted knapweed	648	5	10	663
Canada thistle	46	40	3	89
Hemp	0	40	0	40
Russian knapweed	21	0	8	29
Dalmation toadflax	12	0	0	12
Wormwood	0	10	0	10
Sowthistle	0	2	0	2
St. Johnswort	1	0	0	1
TOTAL	851	8,179	83	9,113

BY RANGER DISTRICT

Species	Sheyenne RD	Beartooth RD	Sioux RD	Ashland RD	Grand RD	Medora RD	McKenzie RD	Denbigh Ex. For.	Souris Unit
Leafy spurge	5,241	3	150	0	32	2,500	141	200	0
Spotted knapweed	0	108	40	510	0	5	0	0	0
Canada thistle	5	6	10	33	0	5	30	0	0
Hemp	40	0	0	0	0	0	0	0	0
Russian knapweed	0	0	0	21	8	0	0	0	0
Dalmation toadflax	0	12	0	0	0	0	0	0	0
Wormwood	10	0	0	0	0	0	0	0	0
Sowthistle	2	0	0	0	0	0	0	0	0
St. Johnswort	0	0	0	1	0	0	0	0	0
TOTAL	5,298	129	200	565	40	2,510	171	200	0

Chapter IV

Page 31, left column, paragraph 4, line 6. This line now reads as follows:

> Preliminary studies in North Dakota found that picloram was confined to the upper 1 foot of soil within silt and stony loams and to the upper 2 feet within sandy loams when application rates were less than 1 lb. AI/A (pers. com. Lym, NDSU-unpublished report), but that it can readily move to depths greater than 3 feet, even in relatively dry areas, when the application rate is high (3-9 pounds/acre) (NRCC 1974).

Page 31, right column, paragraph 2. The following sentence has been added after line 2: Noxious weeds would likely reinvade tilled sites.

Page 32, left column, paragraph 5. The first line has been deleted as tilling does not improve water quality. Line 2 now reads: Tilling for weed control on a small scale breaks the ground surface and allows a greater infiltration rate.

Page 33, left column, paragraph 3. The following sentence has been added to this paragraph: Hardwood seedlings would be lost.

Page 35, left column, last paragraph. The following paragraph was added to summarize the determinations in the Biological Assessment:

> Analysis of effects on threatened or endangered wildlife included assessment of direct effects such as the posssibility of an animal being sprayed, and indirect effects, such as the impacts on prey bases. Informal consultation was maintained with the USDI Fish and Wildlife Service during the analysis. Direction in the EIS states that a survey will be made prior to any treatment and that if any Threatened or Endangered species is found in the project area, the project will either be modified or cancelled to avoid impacts to the T&E species. The biological evaluation indicated that implementation of tbe herbicide treatment program would not affect the conservation of any federally listed T&E species. Any proposed treatment within MS I and MS II grizzly bear habitat will require another biological assessment.

Page 37, left column, paragraph 4. After line 2, the following sentence has been added to clarify what type of treatment was performed in 1985: A majority of the acres treated in 1985 were treated chemically.

Page 38, left column, last paragraph. After LC50's the following was added in parenthesis to define this term: (A lethal herbicide concentration rate at which 50 percent of test animals will be killed. It is used in testing of fish or other aquatic animals).

Page 38, right column, paragraph 3, line 6. "NOEL's" has been replaced with "doses" because the NOEL is not related to application rates.

Page 38, Table IV-3. This table has been retitled "Characteristics of Herbicides Proposed for Use" which better describes the contents of the table. The "Toxicity" column has been retitled "Acute Toxicity."

Page 38, right column, paragraph 3. Line 3 has been deleted and replaced with the following sentence: For many possible health effects of chemical exposure, a no observed effect level (NOEL) dose can be established as the highest dose that causes no toxicologic change in exposed animals.

Line 5. This line has been deleted.

Line 6. "These NOEL's" has been replaced with "Worst case doses to the general public and workers has been determined".

Line 8. "these" has been replaced with "application rates noted above."

Line 9. This line has been deleted.

These changes in paragraph 3 should make it easier to understand.

Page 39, left column, paragraph 3, line 3. After LD50, the following was added in parenthesis to define this term: (A dosage of toxicant (expressed in milligrams of toxicant per killogram of animal body weight) required to kill 50 percent of animals in a test population when given orally).

Page 40, left column. After the second full paragraph, the following information is added to explained the health risk in layman's terms:

> In reality, members of the general public are unlikely to be exposed to herbicide from most porjects proposed on the Custer National Forest. Most herbicide application occurs on remote sites and at distances of over a mile from the nearest residence. Visitation of these sites would be extremely rare. The exceptions would be on the Beartooth District. Approximately six campgrounds and two trailheads would be treated with herbicide. However, treatment within the campgrounds and trailheads would be small (2-1/2 acres, 1/2 lb. AI picloram, 2-1/2 acres, 5 lb. AI 2,4-D). These sites would be signed, warning the public of the treatment (see Mitigation Measures).
>
> The does of workers and members of the gen-

eral public are calculated using various conservative assumptions that overestimate impacts. For example, open-range projects are assumed to be within 200 meters (one-eighth mile) of a residence when, in fact, residences are typically further than a mile from open-range projects and none are closer than one-quarter mile.

In reviewing the dose/NOEL comparison on the tables in Appendix B, with but few exceptions discussed below, the worst-case doses to maximum-exposed members of the general population are all below ADI values. From the standpoint of general toxic effects (non-carcinogenic), a dose can be considered safe if it is below the ADI. The converse is not necessarily true, that is doses above the ADI are not necessarily harmful. The ADI presumes a daily dose everyday for a lifetime, and higher short-term doses can often be tolerated safely.

The dose comparisons show that the dose to a visitor to National Forest System lands could exceed the ADIs if he or she collects and consumes a large quantity of sprayed, unwashed vegetation. For numerous reasons, there is a very low probability of this event. Very little land is actually being sprayed for noxious weeds. The vegetation which is the target (knapweed, leafy spurge, thistle, etc.) is not edible. Finally, the appearance, odor and taste of they sprayed vegetation would significantly reduce palatability of wild foods. At concentrations about 5 to 1 mg/kg (parts per million) on food, 2,4-D, picloram and dicamba impart a bitter taste to food. Notwithstanding these consumption limiting factors, the calculated doses indicate that even if these improbable events were realized, adverse health impacts would be highly unlikely with such a transient dose.

Under normal protection scenarios, worker dose is estimated to be 11 to 33 times less than the NOEL based on animal tests. Since humans can be 6 to 12 times more sensitive to chemicals than test animals (see Section 2.5 of the Northern Region Risk Analysis in appendix 8b), some workers could experience short-term, reversible effects on kidney function although symptoms would not be obvious over the typical application period. Again, the importance of careful application techniques and use of protective clothing must be emphasized to workers. (See Chapter II, Mitigation Measures.)

Although the evidence on the cancer-causing potential of 2,4-D and picloram is ambiguous, both compounds are assumed to cause cancer. Glyphosate tests on mice and rats indicated the evidence of oncogencity is extremely limited (EPA, 1985). Chronic tests of dicamba indicates no carcinogenic potential.

The linear cancer model used in the analysis estimates the upper bound of the cancer risk and generally overestimates risk. Therefore, the cancer risk as estimated by the risk analysis has a built-in margin of safety for humans. The calculated risks are below those associated with natural background radiation that humans encounter on a daily basis. This level of cancer risk is accepted by the Food and Drug Administration and the Environmental Protection Agency.

The possible cumulative and synergistic impacts of Forest Service spraying, in addition to impacts from other spraying, are discussed in Section 2.8 of the Northern Region Risk Analysis in Appendix 8b. Given the widely scattered nature of these herbicide treatments, such effects are not reasonably expected.

Chapter V

Page 41, Resource Support Specialists, left column. Added to this list are those people who assisted in the completion of the Final Environmental Impact Statement:

Bruce Anderson
Range Conservationist, Beartooth Ranger District-B.S. in Range Management, North Dakota State University, 1978; 7 years of Forest Service experience; primary responsibilities in range, wildlife and watershed.

Barbara Beckes
Forester, Beartooth Ranger District-B.S. in Forest Management, University of Wisconsin, 1979; 6 years of Forest Service experience; primary responsibilities in minerals, timber and fire.

Beverly Ramsey
Clerk-typist, Central High School, St. Paul MN, 1970; 4 years of experience with Federal Government.

Page 41, Consultation with Others, right column. The following names have been added to this list:

Ardell Bjudstad
Rocky Mountain Forest and Range Experiment Station, Rapid City, South Dakota.

Pete Faye
Weed Specialist, Plant and Soil Science Department, Montana State University, Bozeman, Montana.

Rodney Lym
North Dakota State University, Fargo, North Dakota.

CHAPTER VI

LIST OF AGENCIES, ORGANIZATIONS, AND ELECTED OFFICIALS TO WHOM COPIES OF THE DEIS WERE SENT

ELECTED OFFICIALS

Montana

Max Baucus, U.S. Senator
Carroll Graham, State Senator
Marion Manning, State Congressman
Ron Marlenee, U.S. Congressman
John Melcher, U.S. Senator
S.A. Olson, State Senator
Ted Schwinden, Governor of Montana
Pat Williams, U.S. Congressman
Robert Wilson, District Judge
Montana County Commissioners
  Carbon County
  Carter County
  Park County
  Powder River County
  Rosebud County
  Stillwater County
  Sweetgrass County
Montana County Conservation Districts
  Carbon County
  Carter County
  Park County
  Powder River County
  Stillwater County
  Sweetgrass County
Montana County Extension Agents
  Carbon County
  Stillwater County
  Sweetgrass County
Montana County Weed Boards
  Carbon County
  Carter County
  Park County
  Powder River County
  Rosebud County
  Stillwater County
  Sweetgrass County

North Dakota

Mark Andrews, U.S. Senator
Quentin Burdick, U.S. Senator
Byron Dorgan, U.S. Congressman
North Dakota County Commissioners
  Billings County
  Bowman County
  Dunn County
  Golden Valley County
  Grant County
  McHenry County
  McKenzie County
  Ransom County
  Richland County
  Sioux County
  Slope County
  Stark County
North Dakota County Extension Agents
  Bowman County
  Richland County
North Dakota County Weed Boards
  Billings County
  Dunn County
  Golden Valley County
  Grant County
  McHenry County
  McKenzie County
  Ransom County
  Richland County
  Sioux County
  Slope County

South Dakota

James Abdnor, U.S. Senator
William Janklow, Governor of South Dakota
G.F. Mortimer, State Congressman
South Dakota County Commissioners
  Corson County
  Harding County
  Perkins County
  Ziebach County
South Dakota County Soil District
  Harding County
South Dakota County Weed Boards
  Corson County
  Harding County
  Perkins County
  Ziebach County

FEDERAL AGENCIES

Agriculture Research Service
Animal and Plant Health Inspection Service
ASCS Office
Bureau of Indian Affairs
Bureau of Land Management
Bureau of Reclamation
Cooperative Extension Service
Corp of Engineers
Environmental Protection Agency
Farmers Home Administration
Fish Control Laboratory
Fish and Wildlife Service
Forest Service
  Bighorn National Forest
  Gallatin National Forest

  - Helena National Forest
  - Intermountain Range and Experiment Station
  - Intermountain Research Station
  - Nebraska National Forest
  - Northern Regional Office
  - Rocky Mountain Range & Forest Experiment Station
  - Rocky Mountain Research Station
  - Shoshone National Forest
- National Park Service
  - Theodore Roosevelt National Park
  - Yellowstone National Park
- North Country Scenic Trail Coordinator
- Northern Great Plains Research Center
- Soil Conservation Service

STATE AGENCIES

Montana

Department of Agriculture
Department of Community Affairs
Department of Fish, Wildlife and Parks
Department of Health
Department of Natural Resources & Conservation
Department of State Highways
Department of State Lands
Extension Service
Governor's Office
Public Lands Council
State Clearinghouse
State Historic Preservation Officer
State Library

North Dakota

Clearinghouse
Dakota Resource Council
Department of Agriculture
Department of Health
Department of Lands
Division of Planning
Environmental Review Coordinator
Forest Service
Game and Fish Department
Highway Department
Natural Heritage Program
Parks and Recreation Department
Soil Conservation Committee
State Historic Preservation Officer
State Water Commission

South Dakota

Commissioner of Schools and Public Lands
Department of Game, Fish and Parks
Department of Water and Natural Resources
Governor's Office
Intergovernmental Relation
State Clearinghouse
State Historic Preservation Office

ORGANIZATIONS, ASSOCIATIONS, CLUBS, ETC

Absaroka-Beartooth Outfitters
American Fisheries Society
American Wilderness Alliances
Animal Science
Association of National Grasslands
Audubon Society
Badlands Environmental Association
Balta Wildlife Club
Bank of Lemmon
Basin Electric Power Coop
Billings Rod and Gun
Birney Land Protective Assoc.
Bottineau County Wildlife Club
Buffalo Wildlife Club
Cass County Wildlife Club
Cavalier County Wildlife Club
Central Dakota Sportsmen
Central Morton Sportsmen
CHEC
Colorado State University
Crow Indian Agency
Defenders of Wildlife
Dickey County Wildlife Club
Dickinson Public Library
Eastern Montana College
Fort Berthold Indian Reservation
Gackee Wildlife Club
Grand Fork Library
Grand River Grazing Association
Grand River Sports Club
Great Bear Foundation
Greater Yellowstone Coalition
Hannaford C&W Club
Harding County Stockgrowers Association
Horse Creek Cooperative Grazing Association
Idaho State University
Inland Forest Resource Council
Kindred Wildlife Federation
League of Women Voters
Little Missouri Grazing Association
McKenzie County Grazing Association
Medora Grazing Association
Meridian Land and Mineral Company
Montana Bowhunters Association
Montana Dakota Utilities - Montana
Montana Dakota Utilities - North Dakota
Montana Power Company - Butte
Montana State University
Montana Stockgrowers Association
Montana Water Development Association
Montana Wilderness Association
Montana Wilderness Society
Montana Wildlife Federation
Montana Woolgrowers Association
Moorhead State University
National Audubon Society
National Wildlife Federation
Nature Conservancy of North Dakota
North Dakota Association of Soil Conservation Districts

North Dakota Bowmen Association
North Dakota Chapter of the Wildlife Society
North Dakota Grazing Association
North Dakota Heritage Center
North Dakota Natural Science Society
North Dakota State University, Agricultural Experiment
North Dakota Stockmen's Association
North Dakota Wildlife Federation
Northern Cheyenne Agency
Northern Plains Resource Council
Pennzoil Company
Production Credit Association
Ransom County Drainboard
Red Lodge Rod and Gun
Richland County Drain Board
Rocky Mountain Oil and Gas Association
Sheyenne 4-H Camp Association
Sheyenne Valley Grazing Association
Sheyenne Valley Association
Sierra Club
Society of American Foresters
Society of Range Management
South Dakota State University, Plant Science Department
South Dakota State University, Extension Service
South Dakota State University, Agricultural Experiment Station
South Dakota Wildlife Society
Stutsman Wildlife Federation
Southeastern Sportsmen Association
Trout Unlimited
United Sportsman of North Dakota
University of Montana
University of North Dakota
Western Environmental Trade Association
Western Gas Processors
Western Soil Conservation District
Wilderness Society
Wildlife Federation
Wildlife Management Institute
Wildlife Society
Wyoming Environmental Institute
Yellowstone Basin Group, Sierra Club
Yellowstone Bighorn Research Association
Yellowstone Valley Audubon Society

Chapter VII

Page 44. Chapter VII, "Public Comments Received" have been added.

#1

1115 West Porphyry
Butte, Montana 59701
March 6, 1986

To: David Filius, Supervisor
Custer National Forest
P.O. Box 2556
Billings, Montana 59103

From: Mrs. Ruth M. Koch

Re: Noxious Weed Treatment Program

Thank you for the Draft Environmental Impact Statement for the Noxious Weed Treatment Program on the Custer National Forest.

I am in general agreement with your choice of Alternative 4.

I will continue my own individual hand-grubbing program on the East Rosebud approach and on the East Rosebud Lake Association property.

With regard to the program in the Absaroka-Beartooth Wilderness I would deem it none too early to take whatever steps are necessary to prevent its invasion. The 1/2 acre xxxx infestation listed on page 36 could surely be eradicated by early hand-grubbing without any impact. Please don't let it grow.

The West Fork of Rock Creek entrance will have to be under continual surveillance because of heavy infestation in that drainage. But, indeed, all drainage entrances should be carefully watched. A

Thank you,

Ruth M Koch
Mrs. Ruth M. Koch

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A. Thank you for your comments. Noxious weed treatment within the Absaroka/Beartooth and West Fork of Rock Creek (Red Lodge Municipal Watershed) will be initiated upon completion of site specific environmental assessments (EAs). These EAs will tier off the EIS and be completed in 1987. (See FEIS errata for Chapter I.)

3/3/86 #2

Dear Sir,

re. DEIS for noxious weed treatment program.

There are two glaring omissions in the DEIS which should be corrected in the final – and which may suggest modifying the preferred alternative.

① There is no economic analysis. There is no data on how much the program will cost, and none on what economic benefits will hopefully result.

A

② there is no data to place the weed problem on national forest lands in perspective relative to surrounding private lands. your program should present data on levels of infestation on adjacent private + other public lands, and discuss the effectiveness of your program in the light of the total problem + the non-Forest Service efforts which are also being applied to solve it.

B

also, I'd like to see a better section on monitoring – specifically post-treatment analysis, with some feedback provisions that would trigger re-evaluation of the program.

C

also, the time-frame for the program is not spelled out. how long will it run? how many acres will need repeated treatment, and on what schedule?

D

Please send me the Decision Notice and Final EIS.

Sincerely, Edwin Jones 1027 N. Jackson

Helena, MT 59601

MAR 1 1986
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A. We have looked at the benefits of this program in the terms of improved vegetative diversity and condition which has implications for nearly allof the Forest's programs. We quantified the direct losses to the livestock industry and indicated the cost of the program in 1985 to be $83,000.

We have added a economic discussion to the FEIS to indicate the relative costs of the various treatment methods.

B. We do maintain cooperative relations with counties and other agencies. Where possible, we treat areas adjacent to other treated lands. We cannot expend funds to survey non-Federal lands. Any attempt to display the problem on adjacent lands would in all probability be highly speculative.

C. The monitoring program for all activities on the Forest is established in the draft Forest Plan, due to be finalized in June 1986. Howver, we have included the specific noxious weed monitoring requriements in this FEIS.

D. We have added a new section to the FEIS, Amendment and Revision.

PARK COUNTY WEED CONTROL BOARD
414 East Callender Livingston, Montana 59047

ARLO SUTTON
DON WOOD
JACK WILCOX
MALCOLM ADAMS
HAL BOWLOS

#3 ✓

March 11, 1986

David Filius
Forest Supervisor
Custer National Forest
P.O. Box 2556
Billings, MT 59103

Weed prevention activities through a clean hay program, trailhead weed infestation inventory, and trailhead weed control should be enacted and enforced. A

The forest acres in Park County on the Custer National Forest are relatively free from noxious weeds however, mining activity and the use of weed infested hay could change that situation. B

Sincerely,

Marty Malone
for
Wayne Goffena
Weed Board Chairman

WG/sb

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A. Thank you for your comments. Trailheads situated on National Forest are considered areas of concentrated use, are routinely inventoried and are considered high priority for treatment. If noxious weeds are discovered they will be treated under the preferred alternative. (See DEIS Chapter II, Description of Alternatives.)

B. We recognize the need to maintain weed-free, as weed-free. Our preferred alternative will continue a program to inhibit the spread of noxious weeds. You may be interested in reviewing the Record of Decision (December 1985) for the Stillwater Mine EIS that contains measures for noxious weed treatment at the mine site.

COOPERATIVE EXTENSION SERVICE
SOUTH DAKOTA STATE UNIVERSITY

College of Agriculture and
Biological Sciences

Agricultural Research
& Extension Center
801 San Francisco Street
Rapid City, South Dakota 57701
Phone (605) 394-2236

✓
#4

March 10, 1986

Dr. David A. Filuis
Forest Supervisor
Custer National Forest
P.O. Box 2556
Billings, MT 59103

Dear Sir:

I have reviewed your Environmental Impact statement. I find that I am in agreement with the use of integrated pest management aimed at treating new areas of noxious weeds.

Because these areas of new noxious weeds are small, it is environmental sound to use herbicides to control them before they infect a larger area. This way the total damage to trees and shrubs could be less than if the small areas were allowed to spread prior to treatment.

Biological control, I feel, should be used when the noxious weed infected areas are large and the total environmental impact would be great from the use of herbicides.

In summary, I would like to compliment your staff on checking and treating areas of leafy spurge in S.D. I am glad to see that S.D. has only 62 acres. I am sure the number of acres would have been much larger if your personnel did not have herbicides as tools to control this noxious weed. A

Sincerely yours,

Clair Stymiest

Clair Stymiest
Extension Agronomist

CS/nh

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South Dakota State University South Dakota Counties and U S Department of Agriculture Cooperating

A We appreciate your support of our preferred alternative. We agree with your assessment of the situation.

COOPERATIVE EXTENSION SERVICE

SOUTH DAKOTA STATE UNIVERSITY
Box 2207A
Brookings, South Dakota 57007

Department of Plant Science
Field Crops—Entomology—Pathology
—Soils—Weeds
Main Office, 219 Agricultural Hall
605/688-5121

College of Agriculture
and Biological Sciences

#5

March 11, 1986

David A. Filius
Forest Service
2602 1st Avenue North
P.O. Box 2556
Billings, MT 59103

L. A. Erscheid
Extension Service
South Dakota State University
Brookings SD 57006

Dear Mr. Filius:

The Custer National Forest Impact Statement was routed to me. I've just reviewed it briefly; it is comprehensive and detailed. There is a great deal of reference information summarized in the two documents provided.

The mailing was to L. A. Derscheid, he has retired. As Extension Weed Specialist, I'm interested in the information and in assisting in any way possible if you wish to revise the mailing list.

Thank you.

Sincerely,

Leon J. Wrage

Leon J. Wrage
Extension Agronomist - Weeds

LJW:pe

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MAR 13 198
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A

A. Thank you for your interest in the Custer NF program.

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
Endangered Species, Field Office
Federal Bldg., U.S. Courthouse
301 South Park
P.O. Box 10023
Helena, Montana 59626

✓
#6

IN REPLY REFER TO.

M.19(I)

March 11, 1986

Mr. David A. Filius
Forest Supervisor
Custer National Forest
2602 1st Avenue North
P. O. Box 2556
Billings, Montana 59103

13

Dear Mr. Filius:

This responds to your letter of March 4, 1986 regarding the proposed Noxious Weed EIS for the Custer National Forest.

In accordance with Section 7(c) of the Endangered Species Act as amended (ESA), we have determined that the following listed and proposed threatened or endangered (T/E) species may be present in the project area.

Listed Species	States	Expected Occurrence
Bald eagle (_Haliaeetus_ _leucocephalus_)	MT, ND, SD	Resident, migration, wintering
Peregrine falcon (_Falco_ _peregrinus_)	MT, ND, SD	Migration
Whooping crane (_Grus_ _americana_)	ND, SD	Migration
Black-footed ferret (_Mustela_ _nigripes_)	MT, ND, SD	Possible resident of prairie dog towns
Piping plover (_Charadrius_ _melodus_)	ND, SD (threatened)	Possible resident of alkali wetlands & sandbars
Grizzly bear (_Ursus_ _arctos_ _horribilis_)	MT (threatened)	Resident

Proposed Species

None.

A

A. We appreciate your list of possible T&E species in our area.

We provide the following candidate plants for your consideration. All were published as Catagory 2 species in FR 50(188):39526-39584 on Friday, September 27, 1985 (enclosed), and may or may not occur in areas affected by the proposed action.

Name - Scientific/Common	State
Platanthera leucophaea/ white-fringed prairie orchid	ND/SD
Erigeran	ND/SD
Astragalus barrii/none	SD/MT(@ Colstrip)
Shoshonea pulvinata/none	MT (Pryor Mts/ near Red Lodge)
Rorippa calycina/none	MT
Erigonum lagopus/Buckwheat	MT (Pryor Mts)
Antennaria aromatica/none	MT (Absaroka Mts)

Catagory 2 species are in taxa for which information known to the Service indicates that proposing to list them as endangered or threatened species is possibly appropriate, but for which substantial data on biological vulnerability and threat(s) are not currently known or on file to support the immediate preparation of rules. Any information you may have about these species could be helpful to the Service. These species do not currently have any special protection under the Endangered Species Act, but listing is possible if further information about their status or threats is acquired.

We provide the following contacts to assist you in finding information about listed or Catagory 2 species.

Alexis Duxbury
North Dakota Natural Heritage Office
Bismark, ND
Phone: (701) 224-9870

David Ode
South Dakota Natural Heritage Office
Pierre, SD
Phone: (605) 773-4229

Steve Shelly
Montana Natural Heritage Office
Helena, MT
Phone: 444-3009

B

B. We have added these Category 2 plants to our list of Unique Plants, Appendix H. We have been or will bein contact with the Natural Heritage officials prior to project implementation.

Section 7(c) of the ESA requires that Federal agencies, proposing major Federal actions, conduct a biological assessment to determine the effects of the proposed actions on listed and proposed species. If the biological assessment is not initiated within 90 days, the list of T/E species should be verified with the FWS prior to initiation of the assessment. The biological assessment should be completed within 180 days of initiation, but can be extended by mutual agreement between your agency and the FWS. The biological assessment may be undertaken as part of your agency's compliance of Section 102 of NEPA, and incorporated into the draft or final NEPA document. The biological assessment should include:

1) a description of the project;
2) the current status, habitat use, and behavior of T/E species in the project area;
3) discussion of the methods used to determine the information in item 2;
4) direct and indirect impacts of the project to T/E species;
5) cumulative impacts from federal, state, or private projects in the area;
6) coordination measures that will reduce/eliminate adverse impacts to T/E species;
7) the expected status of T/E species in the future (short and long term) during and after project completion;
8) determination of "no affect/may affect" to listed species;
9) citation of literature and personal contacts used in assessment.

If you determine that the project "may affect" any of the above listed species, formal consultation should be initiated with us. If you conclude that "no effect" is likely, we should be asked to review the assessment and concur with your determination of no effect.

Section 7(d) of the ESA requires that the Federal agency and permit or license applicant shall not make any irreversible or irretrievable commitment of resources which would preclude the formulation of reasonable and prudent alternatives until consultation on listed species is completed.

C

C. A biological assessment has been completed and forwarded to your office. A summary of the assessment appears in the FEIS, Errata Sheet, Chapter III, page 35.

Please contact us by mail at the above letterhead address or by telephone at 406-449-5225 (FTS 585-5225) if we can be of further assistance.

Sincerely,

Wayne G Brewster

Wayne G. Brewster
Field Supervisor
Endangered Species

cc: Regional Director, FWS (FA/SE), Denver, CO.
ES, Billings, MT

Enclosures

U.S. Department of Housing and Urban Development
Denver Regional Office, Region VIII
Executive Tower
1405 Curtis Street
Denver, Colorado 80202-2349

#7

March 12, 1986

Mr. David A. Filuis
Forest Supervisor
Custer National Forest
P.O. Box 2556
Billings, MT 59103

Dear Mr. Filuis:

This is in response to your February 27, 1986, letter requesting comments on the Custer National Forest Draft Environmental Impact Statement (DEIS) Noxious Weed Treatment Program.

Your DEIS has been reviewed with consideration for the areas of responsibility assigned to the Department of Housing and Urban Development. This review considered the proposal's compatibility with local comprehensive planning and impacts on urbanized areas. Within these parameters, we find this document adequate for our purpose. A

If we may be of further assistance, please contact Mr. Howard S. Kutzer, Regional Environmental Officer, at (303) 844-3102.

Sincerely,

for Robert J. Matuschek
Director
Office of Community
Planning and Development

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A. Thank you for your comments.

COOPERATIVE EXTENSION SERVICE

SDSU
SOUTH DAKOTA STATE UNIVERSITY

College of Agriculture and
Biological Sciences

Agricultural Research
& Extension Center
801 San Francisco Street
Rapid City, South Dakota 57701
Phone (605) 394-2236

#8

March 12, 1986

David A. Filius
Forest Supervisor
Custer National Forest
2602 1st Avenue North
P.O. Box 2556
Billings, MT 59103

Mr. Filius:

I have reviewed your EIS for the control of noxious weeds on the Custer National Forest, and do support Alternative 4.

I am acutely aware that some of these weeds, especially leafy spurge and knapweed, can have such complex, serious, and negative environmental impacts that it is nearly impossible to project the benefits of their control in terms of cost effectiveness. After seeing the devastating effects of leafy spurge infestations near Devil's Tower, and examining the impacts of knapweed in Montana, I am convinced that wherever possible infestations should be held in check and acreages decreased.

As I view it, active control programs will buy us the time necessary to develop even more effective means of control in the future.

Thank you for the opportunity to review.

A

Sincerely,

Jim Johnson

James R. Johnson
Range Management Specialist

JRJ/at

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South Dakota State University, South Dakota Counties and U.S. Department of Agriculture Cooperating

A. **We appreciate your support for Alternative 4.**

#9

USDA, ARS
Rangeland Insect Laboratory
% Montana State University
Bozeman, Montana 59717
March 14, 1986

David A. Filius
Forest Supervisor
Custer National Forest
P. O. Box 2556
Billings, Montana 59103

Dear David,

I reviewed the Custer National Forest Draft Environmental Impact Statement for noxious weed treatment program and found it to be good. Since my expertise is mainly biological control, I concentrated on that portion, and did see several weak points. If you would be interested, I can send you a bibliographical listing relating to many of the biocontrol agents that are being studied, some of which are available now. You are correct in your statement that very few biocontrol agents are available at this time, but it is hoped that in the near future, many more will be in numbers sufficient for collection and redistribution.

With your permission, I would like to keep the copy that you sent to me. If there is anything that I can help you with, please let me know.

Sincerely,

Norman E. Rees

Norman E. Rees
Research Entomologist

A

A. We appreciate your support. We would appreciate receiving the bibliography listing of biocontrol agents that are currently being studied. All of us are concerned about the spread of noxious weeds and hope that biological control will become a major force for control in the near future. You are welcome to keep the DEIS we sent you.

REC'D
MAR
CUSTER NATIONAL
FOREST

#10

State Historical Society
of North Dakota (State Historical Board)
North Dakota Heritage Center, Bismarck, N D 58505
Telephone 701-224-2666

IN RESPONSE PLEASE REFERENCE: 86-226

March 13, 1986

David A. Filius
Supervisor
Custer National Forest
P O Box 2556
Billings, MT 59103

RE: 1950; Draft Environmental Impact Statement (DEIS); Noxious Weed Treatment Program.

Dear Mr. Filius:

We have reviewed the above referenced document, and find that cultural resources have been appropriately considered in it. We look forward to working with the Service as individual projects are undertaken.

Thank you for providing us the opportunity to comment on this undertaking. If you have any questions regarding these comments, please feel free to contact Mr. C. L. Dill of our staff at (701)224-2672, or in writing.

A

Sincerely,

CLDill
fa
James E. Sperry
State Historic Preservation Officer
(North Dakota)

CLD/je

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MAR 17 1986
CUSTER NATIONAL
FOREST

A. Thank you for your review.

#11

SOUTH DAKOTA
Department of Agriculture

DIVISION OF REGULATORY SERVICES
Anderson Building, 445 East Capitol
Pierre, South Dakota 57501
Phone 605/773-3724

March 20, 1986

Mr. David A. Filuis
Forest Supervisor
Custer National Forest
P.O. Box 2556
Billings, MT 59103

Mr. Filuis:

A

The South Dakota Department of Agriculture is the agency in South Dakota charged with administering the State's Weed & Pest Program. The State Program is formulated by the State Weed & Pest Control Commission and coordinated by the State Weed & Pest Coordinator. Wouldn't it have, therefore, been prudent to have included the Department of agriculture and/or State Weed & Pest Control Commission among the state agencies to whom copies of the proposed EIS were sent?

A. We apologize for the unintentional omission of your Department from the mailing list. It will be included in future mailings.

The Plant Industry Section, Division of Regulatory Services, Dept. of Agriculture, has obtained a copy of the proposed EIS and submits the following comments relative to its approval:

B

1. Be advised that page 9 relative to biological control agent release is in error. Prior to the release of any biological control agent in South Dakota, State approval is required. This section should therefore be corrected prior to the final approval of the EIS.

B. Your comment pertaining to release of biological control agents is correct and changes have been made in the Final EIS.

C

2. It is acknowledged that Custer National Forest's plan for the control of noxious weeds currently found within the Forest boundaries appears sound. However, it is imperative that a section concerning control of noxious weeds that may invade forest service land from adjacent lands or appear as a new infestation in the area be added. This is necessary to insure these new introductions do not become established and hence create severe problems prior to new authority to act is obtained. The State of South Dakota is especially concerned about Musk Thistle (Carduus nutans), Field Bindweed (Convolvulus arvensis), and Hoary Cress (Cardaria draba).

C. It is our intent to cooperate with States and Counties in the control of noxious weeds. This intent is stated in Chapter 1, Purpose and Need for action and specific species are identified in Appendix A. If any of the listed noxious weeds invade Forest Service administered lands, control measures may be taken which are within the slope of the Final EIS.

24
CUSTER
FOREST

With the addition of a section pertaining to item 2 above and the correction of page 9 as per item 1, we would recommend the EIS be approved. D

Sincerely,

Jimmy Krsnak

Jimmy Krsnak, Administrator
Plant Industry

JK/cj

D. Thank you for your suggestions and support for the Custer National Forest Noxious Weed Treatment Program DEIS.

#12

NORTH DAKOTA
DEPARTMENT OF AGRICULTURE

Kent Jones
COMMISSIONER

March 24, 1986

Mr. David Filius
Forest Supervisor
Custer National Forest
2601 1st Ave. North
Box 2556
Billings, MT 59103

RE: Comments on the Environmental Impact Statement

Dear Mr. Filius:

This will serve as the North Dakota Department of Agriculture's official comment to the draft Environmental Impact Statement.

Because of the widespread infestation of noxious weeds in North Dakota, it is advantageous to have as many trained pesticide applicators as possible combatting this serious problem.

Certified private and commercial applicators provide ample training, skills, time and money in controlling and eradicating noxious weeds in North Dakota. Moreover, it is important that certified private applicators not be restricted beyond current private applicator limitations in this cooperative effort.

In response to the MITIGATION MEASURES on page 13, paragraph 6 of the EIS, the department concludes that certification requirements should be consistent with state and federal pesticide certification laws. Private applicators, for instance, should be allowed, under their private certification training, to apply "Restricted Use Pesticides" on Forest Service Land that is included in their farming and/or ranching operation.

A

A. We appreciate your concerns regarding certification of private applicators versus commercial applicators on the National Grasslands in North Dakota.

Apparently there has been considerable discussion over definitions, i.e., lease, rent, etc. These definitions are not to be manipulated. If a farmer is grazing cattle and/or harvesting forage on Forest Service Land, state and federal pesticide laws require him to be certified as a private

B

B. As stated in my letter to you, dated April 23, 1986, we wholeheartedly agree with your recommendation that a meeting be held sometime soon with Duane Bergland (Cooperative Extension Service), Kevin Pifer, Glenn Roloff and Bill Fortune to discuss our concerns regarding the additional training needs for private applicators.

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MAR 1986
CUSTER NATIONAL FOREST

Mr. David Filius
Page 2
March 24, 1986

aoplicator if he applies "RUP's" on that particular land. The law does not require him to be certified as a commercial applicator. Pursuant policy adopted by the Forest Service should be consistent with FIFRA, the North Dakota Pesticide Act and the North Dakota Pesticide Plan. B cont

If, however, the applicator applies "RUP's" on land not included in his farming/ranching operation, then he must be certified as a commercial applicator. C

This concludes the departments comments on the draft EIS. Thank you for giving the department the opportunity to comment.

Sincerely,

Kent Jones

Kent Jones
Commissioner

KJ/cl
cc: U.S. Senator Mark Andrews
Duane Berglund, Extension Service
Susan Vogt, EPA

C. As Glenn Roloff stated in his April 9 meeting with Kevin and you, we want qualified applicators controlling noxious weeds on lands we administer, whether they are certified as private or commercial applicators. The meeting you recommend will provide all of us the opportunity to discuss this further and to identify additional training needs. No change in wording has occurred between the draft and final EIS.

#13

TO: Custer National Forest Weed Control Team

FROM: Montana Wilderness Association

RE: Noxious Weeds on public lands

March 26, 1986

Dear Custer National Forest Weed Control Team;

Thank you for the opportunity to comment on the Custer National Forest Noxious Weed Control Treatment Program and Draft Environmental Impact Statement. I make these comments on behalf of the Montana Wilderness Association as well as myself.

The Montana Wilderness Association's main concern is keeping noxious weeds out of wilderness and other backcountry areas. This can only be done by getting the weed problem along roads and adjacent areas under control. We therefore support an integrated weed control program, which uses chemical, manual, mechanical, biological, and other effective methods to control control weeds. Emphasis should be placed on use of nonchemical methods where applicable. A

A. This action is precisly the strategy outlined in DEIS preferred alternative 4. (See Chapter II, Description of Alternatives.)

One important addition we would like to see put into the EIS is a listing of items which will be a part of your weed control program. Each of these policy items are preventive or passive types of control and can be used under any of the alternatives. By listing these items, your control program will be much better understood by both the public and the Forest Service. With this straight forward emphasis and discussion in the final document, 10 p2

the treatment program will have a much greater chance of success.

Listed below are those items which should be included in your Noxious Weed Treatment Program. A good place to list them would probably be the start of Chapter 2.

1. The Forest Service should direct action to first halt the spread by eradicating new outbreaks and small infestations, and second, reduce large existing infestations.	B	**B. See the reply to item A, above.**
2. The Forest Service should emphasize eradication of weed infestaions at trailheads since these are the major source of spread of noxious weeds into the backcountry.	C	**C. See reply to Letter #3, item A.**
3. The Forest Service should consider the potential for noxious weed introduction and infestations in management decisions. Land use activities which are conducive to the introduction and spread of noxious weeds should be eliminated.	D	**D. The potential for the spread of noxious weeds is considered in every ground disturbing project. That is why there are requirements for rehabilitation and reseeding for activities such as road-building, timber sales, oil well development and pipeline installations. The overall Forest concern for rehabilitation and reclamation for disturbed areas not only in response to noxious weed potential, but soil erosion, visual impact and wildlife habitat, is contained in the draft Forest Plan. The potential of noxious weed infestation is not considered to be so devastating to preclude such activities.**
4. The Forest Service should establish a strong weed education program, both internal and external. In particular, all field personnel should be made aware of the weed problem and the forest's weed control program. Trail crews and survey crews could especially help with manual control of the weeds, as well as, helping with the inventory.	E	**E. We feel that the Forest does have a good program for personnel's awareness of noxious weed infestations and treatment. There are regular training opportunities in the areas. External education or public information regarding noxious weeds has primarily been a state or extension service responsibility. However, we feel we are participating in this effort as we continue to develop individual treatment programs with grazing associations, permittees and county weed boards. Our environmental education and wilderness no-trace programs address the noxious weed situation. We have had an active treatment program for over five years, external.**
5. A complete on-going inventory and monitoring program of all known weed infested areas, treated and untreated, must be implemented in order to have a successful program.	F	**F. The Forest does and will continue to conduct noxious weed inventories and monitoring. (See Chapter II, Mitigation Measures.)**
6. The Forest Service should work with counties to identify non-forest weed infested areas (gravel pits, etc.) that are potential sources of infestation to Forest Service lands.	G	**G. See reply to Letter #2, item B.**
7. Forest Service vehicles, private road construction, logging,	H	

mining, and oil development vehicles should be cleaned regularly to prevent attachment of noxious plant parts or seeds. H

8. Parking lots for Forest Service and industry vehicles should be weed free. I

9. The cost of weed control should be included in the cost of timber sales, oil leases/exploration, mining activities, and other disturbances. J

10. The Forest Service should undertake an active program to revegetate general sites and use of certified weed-free seed should be required. K

11. The Forest Service should require the use of certified weed-free supplement feed for use in the backcountry. L

12. The Forest Service should close roads and eliminate off-road vehicular travel in weed infested areas. M

13. Herbicide applicators should be thoroughly trained for proper application techniques and safety precautions. N

14. Use of herbicides only as a last resort in wilderness areas. O

One change that should be made in the document is on page 9 under Mechanical Methods. "Noxious weeds can be treated by various mechanical methods such as prescribed burning, mowing, tilling, livestock (sheep) grazing, and manual treatments. Manual treatments would include grubbing,hoeing,and pulling. Additions are underlined. P

H. The Custer's work force awareness of the noxious weed problem will incorporate this concern.

I. We are actually aware of noxious weeds occurring on our administrative site, especially horse pastures. We will continue our program to keep our own back yard weed-free.

J. See reply item D, above.

K. Certified weed-free seed is required on all revegetation projects.

L. Certified weed-free supplement feed is required for back-country (wilderness) use.

M. We appreciate your suggestion. However, it is not practical nor feasible to close all roads in infested areas, particulary in North Dakota. We believe our preferred alternative (4) offers the best combination of strategies to treat the infestations.

N. All projects are supervised or carried out by certified personnel trained in application and handling of herbicides. (See Chapter II, Mitigation Measures).

O. We are not proposing any treatment for the Wilderness at this time. Recognizing the public concerns, however, we will be preparing a proposal in 1987.

P. Not to include manual treatment methods was an oversight. Your comments were added to the EIS. Thank you.

13 p4

We complement you on your commitment to initiate a weed control program and hopefully it will be a success.

Sincerely,

Charles H. Ruzicka

Charles H. Ruzicka

12 p

MONTANA WILDERNESS ASSOCIATION

March 25, 1986

Phillip Jaquith
District Ranger
Box 3420
Red Lodge, Montana 59068

Dear RangerJaquith,

The Montana Wilderness Association feels that although the size ofthe noxious weed infestation within the Absoroka - Beartooth Wilderness is small at this time; this is the time to attack the problem and not five years from now when it is 10 times its present size. We therefore urge you to initiate a weed control program immediately. This program must be both a control program and a program to stop the introduction of weeds into wilderness.

Thank you.

Yours truly,

Charles H. Ruzicka

P.O. Box 635 • Helena, Montana 59624 • (406) 443-7350

#14

PROJECT NOTIFICATION REVIEW UNDER E.O. 12372

FROM: SOUTH DAKOTA STATE CLEARINGHOUSE
ROOM 206, STATE CAPITOL BUILDING
PIERRE, SOUTH DAKOTA 57501
PHONE: (605) 773-3661

STATE APPLICATION NUMBER
(SAI*) SD860310-E02

TO: Mike McNamara

DATE: 3/17

The attached information is referred to your agency for review and comment under the Executive Review Process. Please review the proposal as it affects the plans and programs of your agency as well as those plans with which you are familiar and indicate your comments below.

YOUR COOPERATION IS REQUESTED IN COMPLETING YOUR REVIEW AND RETURNING THIS FORM WITH YOUR COMMENTS TO THIS OFFICE BY NO LATER THAN: 3/24

	YES	NO	COMMENTS
IS THIS PROJECT CONSISTENT WITH THE PLANS, GOALS AND OBJECTIVES OF YOUR AGENCY?			
DOES THE PROPOSED PROJECT CONFLICT WITH ANY APPLICABLE STATUTE, ORDER, RULE OR REGULATION WITH WHICH YOU ARE FAMILIAR?			
DOES THIS PROJECT OVERLAP, CONFLICT OR DUPLICATE OTHER EXISTING PROGRAMS OR AGENCIES?			

PLEASE CONVEY YOUR GENERAL CONCLUSION BY CHECKING THE APPROPRIATE RESPONSE:

- ☐ RECOMMEND APPROVAL
- ☒ XX RECOMMEND APPROVAL ONLY WITH THE CONDITIONS DESCRIBED BELOW
- ☐ RECOMMEND DISAPPROVAL FOR THE REASONS DESCRIBED BELOW
- ☐ ADDITIONAL INFORMATION IS DESIRED AS DESCRIBED BELOW
- ☐ REQUEST A MEETING WITH THE APPLICANT BEFORE COMPLETING COMMENTS
- ☐ NO COMMENTS ON THIS PROPOSAL

REMARKS 1. It would be desireable for the EIS to include a statement relative to the control of noxious weeds not currently found in the Custer National Forest, but known to be in counties adjacent to park land; i.e. Musk Thistle (Carduus nutans). While appendix A lists Musk Thistle and other plants, no plan for control is outlined. Should these plants invade forest service lands or occur there as an initial infestation site in an area, a plan of action is desireable to insure they do not become established and spread to adjacent properties. A

2. Page 9, Biological Control. South Dakota must approve the release of BioControl agents prior to their release. The statement "South Dakota requires only the Federal clearances before a release is made" is incorrect. B

REVIEWERS SIGNATURE

DATE March 19, 1986

TITLE State Weed & Pest Coordinator

PHONE NO. (605)773-3796

SC/A95/01/03/85

A. See Letter #11, reply C.

B. See Letter #11, reply B.

15

SUPERVISOR
DEPUTY
ADMIN
Ofc Srv
Purch
Budget
Resource
Fin Tech
Personnel
Computer
RANGE
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Wildlife
SAW
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Info Asst
Receptionist
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April 2, 1986

RECEIVED
APR 8 1986
CUSTER NATIONAL FOREST

Celestine Lacey
P.O. Box 9055
Helena, MT 59604

Custer National Forest
Noxious Weed EIS Team
P.O. Box 2556
Billings, Montana 59103

Re: Noxious Weed Treatment Program - Draft EIS

Dear Mr. Filius,

Thank you for the opportunity to comment on the Cuater National Forest Noxious Weed Control Treatment Program and Draft Environmental Impact Statement. Overall, I believe your E.I.S. provides an objective discussion of environmental and economic impacts that would result from each of the six alternatives.

The noxious weed problem in Montana is extremely serious and early detection and treatment of invading weed species is essential for weed management on forestland and grazable woodland. This can only be accomplished by utilizing an integrated weed management approach which utilizes biological, cultural, and chemical control methods. Therefore, alternative 4 (the proposed action) provides the best solution for weed management on the Custer National Forest. A

There are several items that I would like to see included in your Noxious Weed Draft E.I.S.

1. Expansion of the noxious weed list to include those listed by the Department of Agriculture for the state of Montana (see attached list). Although all weeds on the list do not need to be considered high priority or targeted plants, management criteria for detection and management of these species should be addressed. This will help to coordinate your weed treatment program with the county noxious weed management plans. B

2. Immediate action should taken to keep noxious weeds from invading back-country and wilderness areas within the forest. This includes controlling weeds along roadsides, trailheads, educating back-country users about noxious weeds, and allowing only certified weed-free feed for animals to be taken on forest service land. C

3. The forest service must adopt a strong weed education program and should address this educational effort within the Noxious Weed Treatment Program. This would include an D

A. Thank you for your review and we appreciate your support for Alternative 4.

B. The target noxious weeds listed are those species known to occur on National Forest lands. Many of the species outlined on the State noxious weed lists are associated with cropland. Our list will be expanded as new weeds are discovered on the National Forest. (See Chapter I, Amendment and Review.)

C. Our preferred alternative identifies priority areas for treatment (see Chapter II, Description of Alternatives). We share your concern for preventive measures. A new section has been added in the FEIS Errata.

D. See reply to Letter 13, item E.

educational program on weed identification and control for all field personnel and a weed education and awareness program targeted at the general public. Weed identification publications, posters, television public service announcements, and other educational techniques could be used to help educate the general public. D cont.

4. Page 9: Include a section on Manual Methods for weed control or include manual control under mechanical contol. This would include hand pulling or hoeing weeds from a site. This method is effective on several of the plant species listed especially newly established infestations with a small number of plants. E

5. Weed prevention techniques should be utilized in all areas of the forest, i.e. require all logging, oil exploration, and construction equipment operating on forest service land to be cleaned before entering a site; closing all newly constructed roads until permenant vegetative cover is established along roadsides; restrict off-road vehicular use; revegete all disturbed sites; and establish long term weed education programs. F

6. Cooperate with private, county, state, and other federal agencies in organizing weed control efforts. G

I hope these suggestions will help improve your noxious weed management program on the Custer National Forest. If you have any questions, please contact me.

Sincerely,

Celestine Lacey

E. Not including manual treatment was an oversight. Your comments were added in the FEIS. Thank you.

F. We appreciate your comment. See reply Letter #13, item H.

G. We have every intention of doing this. See the Issues and Concerns in Chapter I, DEIS.

COUNTY NOXIOUS WEED LIST
(Rules for the County Weed Control Act
Section 7-22-2101)

4.5.201 DESIGNATION OF NOXIOUS WEEDS (1) The department designates certain exotic plants listed in these rules as statewide noxious weeds under the County Weed Control Act 7-22-2101 (5), MCA. All counties must implement management standards for these noxious weeds consistent with weed management criteria developed under 7-22-2109 (2) (b) of the Act. The department established two categories of the noxious weeds. (History: Sec. 7-22-2101 MCA; IMP, Sec. 7-22-2101 MCA; NEW 1986, p. _____ Eff. 3/14/86.)

4.5.202 CATEGORY 1 (1) Category 1 noxious weeds are weeds that are currently established in many counties of the state. Management criteria for control of these weeds is necessary in all counties to contain or suppress existing infestations or to prevent, through eradication or other appropriate measures, new infestations of these weeds. All of these weeds render land unfit or greatly limit the beneficial uses.

(2) The following are designated as Category 1 noxious weeds:

(a) Canada Thistle (*Cirsium arvense*)
(b) Field Bindweed (*Convolvulus arvensis*)
(c) Whitetop (*Cardaria draba*)
(d) Leafy Spurge (*Euphorbia esula*)
(e) Russian Knapweed (*Centaurea repens*)
(f) Spotted Knapweed (*Centaurea maculosa*)
(g) Diffuse Knapweed (*Centaurea diffusa*)
(h) Dalmation Toadflax (*Linaria dalmatica*)
(i) St. Johnswort (*Hypericum perforatum*). (History: Sec. 7-22-2101 MCA; IMP, Sec. 7-22-2101 MCA; NEW 1986, p. _____ Eff. 3/14/86.)

4.5.203 CATEGORY 2 (1) Category 2 noxious weeds are weeds that have not been detected in the State of Montana or have recently been introduced into the State of Montana. These weeds have the potential for rapid spread and invasion of lands, thereby rendering them unfit for beneficial uses. County planning to prevent the spread or introduction of these weeds is necessary. Management criteria for detection and immediate action to eradicate or contain these weeds is necessary in all counties.

(2) The following are designated as category 2 noxious weeds:

(a) Dyers Woad (*Isatis tinctoria*)
(b) Yellow Starthistle (*Centaurea solstitialis*)
(c) Common Crupina (*Crupina vulgaris*)
(d) Tansy Ragwort (*Senecio jacobaea*)
(e) Rush Skeletonweed (*Chondrilla juncea*). (History: Sec. 7-22-2101 MCA; IMP, Sec. 7-22-2101 MCA; NEW 1986, p. _____ Eff. 3/14/86.)

#16

United States Department of Agriculture
Soil Consarvation Servica

Federal Building, Room 443
10 East Babcock Straat
Bozeman, MT 59715

April 7, 1986

RECEIVED
[illegible] 1986
CUSTER NATIONAL FOREST

David A. Filius
Forest Supervisor
Custer National Forest
P.O. Box 2556
Billings, MT 59103

Dear Mr. Filius:

Appropriate SCS staff have raviewed the "Draft Environmental Impact Statement Custer National Forest Noxious Weed Treatment Program". As a result of the review, the following comments are offered.

1. It was falt that grazing management systems (page 4) could ba amphasized more as a weed control strategy. A

2. In the impacts section, there is considerable diacussion about the impacts of herbicide use on soil properties. If, indeed, soil erosion rates are twice as high on spotted knapweed invaded rangelanda (page iii), then it would seem that soil erosion and the associated loss of soil productivity and impacts on water quality would be significant potential aoil resource impacts as a result of not controlling spotted knapweed. B

3. As part of an integrated pest management program, the reseeding of desirable vegetation on disturbed areas to "compete" with noxious weeds was not mentioned. Wa feel seeding disturbed sites with desirable competitive vegetation is an important practice to consider in weed control programs. While the practice will not eliminate the weed in most cases, typically the amount of weeds is significantly reduced. C

Thank you for the opportunity to review and comment on this draft EIS.

Sincerely,

Glen H. Loomis

Glen H. Loomis
State Conservationist

cc:
James B. Newman, Director, Ecological Sciences Division, SCS, Washington, DC
Robert G. Lohmiller, State Resource Conservationiat, SCS, Bozeman, MT

A. The Forest's total grazing program is addressed in the draft Forest Plan. Grazing systems designed to provide vegetation in good condition is our goal. However, we recognized that many noxious weeds are introduced species which can and do invade areas with good and excellent vegetative conditions. It also appears that the predominant class of livestock, cattle have little impact on the control of many noxious weeds.

B. The analysis presented in the DEIS on impacts to soils was refined to the environmental behavior of herbicides in the soil and then how each alternative impacts the soil resource. However, the correlation drawn between no control and control of knapweed is correct.

C. Reseeding is requried as a stipulation for all earth-disturbance activity. Site-specific seed mixtures are developed by the Ranger District and often include certified weed-free seed.

#17

SOUTH DAKOTA HISTORICAL SOCIETY BOARD OF TRUSTEES
State Historical Preservation Center

April 8, 1986

David A. Filuis
Forest Supervisor
Custer National Forest
P.O. Box 2556
Billings, MT 59103

TECHNICAL ASSISTANCE
Project: 860314003 - Custer National Forest: Noxious Weed Treatment Program -- DRAFT Environmental Impact Statement (CNF)
Location: Custer National Forest

Dear Mr. Filuis:

We have reviewed the above referenced Draft Environmental Impact Statement and believe that it appropriately addresses concerns about cultural resources. In particular, we concur with the section "Impacts on Cultural Resourcea" on page 36.

Please contact Jim Wilson at the Historical Preservation Center for further information or assistance. Your concern for the protection of the heritage of South Dakota is appreciated.

A

Sincerely,
Jim Wilson
for
J. R. Fishburne
State Historic Preservation Officer

cc: Robert Alex, State Archaeologist, Ft. Meade

dwf

RECEIVED
APR 11 1986
CUSTER N FOREST

P.O. Box 417, Vermillion, SD 57069 (605) 677-5314 Department of Education and Cultural Affairs, Office of History

A. Thank you for your review.

16

EXT COOPERATIVE EXTENSION SERVICE

NORTH DAKOTA STATE UNIVERSITY OF AGRICULTURE AND APPLIED SCIENCE
U.S. DEPARTMENT OF AGRICULTURE COOPERATING FARGO, NORTH DAKOTA 58105

Extension Administration   April 15, 1986   701-237-7173

Mr. David Filius, Forest Supervisor
Custer National Forest
2601 1st Ave. N
Box 2556
Billings, MT 59103

RE: Comments on the Environmental Impact Statement - Noxious Weed Treatment Program

Dear Mr. Filius:

This will serve as the North Dakota Cooperative Extension Services official comment to the Environmental Impact Statement Draft. The Extension Service conducts the training and certification programs for pesticide applicators.

Since there is a widespread infestation of noxious weeds in North Dakota, it is advantageous to have as many trained pesticide applicators as possible, to combat this growing problem.

Certified private and commercial applicators are provided ample training skills in controlling and eradicating noxious weeds in North Dakota. Moreover, it is important that certified private applicators NOT be restricted beyond current private applicator limitations in this cooperative effort.

In response to the MITIGATION MEASURES on page 13, paragraph 6 of the EIS, the Service concludes that certification requirements should be consistent with state and federal pesticide certification laws. Private applicators, for instance, should be allowed, under their private certification training, to apply "Restricted Use Pesticides" on Forest Service Land that is included in their farming and/or ranching operation. We have visited with the State Department of Agriculture on this matter and have their concurrance. This would be consistent also with our state pesticide plan. Therefore, pursuant policy adopted by the Forest Service should be consistent with FIFRA, the North Dakota Pesticide Act and the North Dakota Pesticide Plan.

If, however, the applicator applies "Restricted Use Pesticides" on land not included in his farming/ranching operation, or applies for hire, then he must be certified as a commercial applicator.

Thank you for giving the Cooperative Extension Service the opportunity to comment.

RECEIVED
APR 18 1986
CUSTER NATIONAL FOREST

Sincerely,

Duane R. Berglund

Duane R. Berglund
Assistant Director - Agr/CRD

DRB/sja
cc: Dr. Myron Johnsrud, Director
North Dakota Cooperative Extension Service

A

A. Thank you for your comments. Please see reply to Letter #12, items A, B and C.

#19

Sheyenne Valley Grazing Association
McLeod, North Dakota

April 18,1986

David A Filius,Supervisor
Custer National Forest
Box 2556
Billings,Mt 59103

Dear Dave:

The Board of Directors, Sheyenne Valley Grazing Association, has long been alarmed by the lack of interest demonstrated by the general public in the disastrous impact leafy spurge has had on the vegetative resources on both public and private lands. The directors are relieved in knowing that the current drive toward control of spurge has drawn enough attention to focus attention on the environmental impact of the plant itself as well as of the implementation of control. They are, therefore, hopeful that the drafts of both the analysis of human health risks and the environmental impact statement will be approved by the public and the courts.

The Board of Directors wishes you to know that Sheyenne Valley Grazing Association chooses to support Alternative 4 because its implementation will meet the presription that the Association has prescribed for its own program for leafy spurge control.

A

Incidentally, Dave, don't you find difficulty with reconciling the first paragraph of GENERAL SETTING with TABLE III-1, page 19 (NOXIOUS WEED TREATMENT PROGRAM- February 1986) ?

B

Yours truly,

Joe Milton,Secy

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A. We appreciate your time taken to review this document and thank you for your support of alternative 4.

B. We have corrected the acreage figures in Table III-1, page 19.

#20

NDSU
NORTH DAKOTA STATE UNIVERSITY
OF AGRICULTURE AND APPLIED SCIENCE
BOX 5435, UNIVERSITY STATION
FARGO, NORTH DAKOTA 58105

Office of Director
Agricultural Experiment Station
Room 315, Morrill Hall
Telephone: (701) 237-7654

For reply, please address:

North Dakota State University
Box 459
Mandan, ND 58554
Phone: (701) 663-6445

April 9, 1986

14 1986
CUSTER NATIONAL FOREST

Mr. David A. Filuis, Forest Supervisor
Custer National Forest
P. O. Box 2556
Billings, MT 59103

Dear Dave:

Enclosed is the copy of the draft EIS "Noxious Weed Treatment Program" that you sent to me. I marked comments in red on this copy. Most are rather minor corrections or suggestions, take them or leave them as you see fit. A

In general, the draft looks good. Hopefully alternative 4 can be implemented. I'm sure you are aware of problems that develop when agencies cannot maintain a continuous control program, particularly for leafy spurge and knapweed. A one-year break in the program can result in complete loss of the gains made in previous years, thus taxpayers $'s down the rat hole! It also causes great problems in coordinated control programs on a county or area basis when public lands can't receive the same level of control as do private lands. Hopefully, in these times of tight funds, the Forest Service can keep their control program funded. B

It appears that the proposal sent to APHIS by the Great Plains Leafy Spurge Committee is to be implemented. It is possible that cooperating agencies and individuals may have to provide some funding in order to get the biological control agents reared, released, and monitored. I think this biological control program is essential to the Forest Service plan, so hopefully FS can become a cooperator when the time comes.

Biological control won't be a reality on a large scale for several more years, but in the meantime, we cannont afford not to control leafy spurge and knapweed in particular, or much long-lasting damage will be done to native vegetation. To me, some trade-off is necessary. The damage or threat of damage to relatively small areas due to chemical control, is a better choice than is damage to large areas by uncontrolled spread of noxious weeds. C

A. Thank you for your comments, corrections and suggestions. Many of them were well founded and corrections were made in the Final EIS.

B. I agree that consistent funding levels are required for effective noxious weed programs. The intent of the preferred alternative is to maintain at least the same program we've had in the past. The EIS discloses to the public the environmental consequences and risk to human health of our preferred alternative.

C. Biological control is essential to our program as herbicides often provide a "band-aid" approach until a long term cure is found.

I hope I have been of some help to you.

Sincerely,

Russ

Russell J. Lorenz
Professor of Range Science

RJL/ks

NORTH DAKOTA ASSOCIATION
OF SOIL CONSERVATION DISTRICTS
OWNER AND OPERATORS OF LINCOLN-OAKES NURSERIES
3310 South Airport Expressway
Box 1601, Bismarck, North Dakota 58502-1601
(701) 223-8518 • 223-8575

#21

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274 8812

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HC 1 Box 26
Beach ND 58621
672 4807

April 11, 1986

David A. Filuis, Forest Supervisor
Custer National Forest
P.O. Box 2556
Billings, Montana 59103

Dear Mr. Filuis:

We have been asked by the Board of Directors of the North Dakota Association of Soil Conservation Districts to respond, on their behalf, to the draft environmental impact on noxious weed control.

In reviewing the draft environmental impact statement on noxious weed treatment program dated February 1986, we agree that from the six alternatives considered, alternative number four (4) would be the preferred choice.

A

Sincerely,

Darrel Dech

Darrel Dech
Area V Director
NDASCD

Sincerely,

Wallace A. Jacobs

Wallace Jacobs
Area V Director
NDASCD

/PD

SUPERVISOR
DEPUTY
ADMIN
Ofc Srv
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Budget
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Fir Tech
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FOREST

Conserve Soil — For Food Tomorrow

A. Thank you for your review and support for alternative 4.

#22

NORTH DAKOTA
SOCIETY OF AMERICAN FORESTERS

Address Reply to Writer at:

Bob Harsel, Chairman
North Dakota Society of
American Foresters
P.O. Box 53
Lisbon, ND 58054

April 18, 1986

David Filius, Forest Supervisor
Custer National Forest
P.O. Box 2556
Billings, Montana 58103

Dear Mr. Filius:

We are conveying our review of the Draft Environmental Impact Statement on the Noxious Weed Treatment Program in Custer National Forest by way of this letter.

We concur in selection of Alternative #4 as best-suited to address the severe noxious weed problem. The large scale of treatment and combination of chemical and biological control agents are needed for reduction of the enormous leafy spurge invasion on U.S. Forest Service land in North Dakota. A

However, we oppose the use of picloram (Tordon) among any wooded vegetation (Type 2 and Type 4 projects), in any form or combination. As shown in Appendix I, both Districts of the Little Missouri National Grassland and the Sheyenne National Grassland are slated for picloram use within "grassland, tree, and shrub" vegetative type that we interpret to include upland wooded settings. This contradicts the advise of leafy spurge treatment authorities in North Dakota. We are aware that picloram has already been used on U.S. Forest Service land in the State, and urge that other control agents immediately be substituted barring safety documentation for trees and shrubs over extended time. The prospect of jeopardizing many hundreds of wooded acres is cause for great concern in a State with scarce forest resources. B

We would like to see the impacts on special areas explicitly addressed, namely designated and proposed Research Natural Areas and Special Interest Areas. The Draft Environmental Impact Statement of the Custer National Forest Management Plan states that noxious weeds may be controlled in Research Natural Areas by hand application methods. C

We support your measure of protection afforded Threatened and Endangered species and unique plants. Among the latter, over half of those listed in Appendix H occur in wooded settings. D

Most importantly, we stress the need for committment to ongoing annual noxious weed inventory, monitoring, and repeat treatments as necessary. We cannot risk to slacken control of this major threat to our forest resources. E

Thank you for the opportunity to comment. Please contact us if we may be of further assistance.

Sincerely,
Bob Harsel
Bob Harsel
Chairman

CUSTER
FOREST

A. We appreciate your support for alternative 4.

B. We can understand and appreciate your concern over the use of picloram under woody vegetation. In response to your concerns and other we have added very specific conditions for the use of picloram under trees in the FEIS.

It is not our intent to treat noxious weeds in a manner that would eliminate wooded vegetation. The use of picloram in wooded draws on the Little Missouri National Grassland is to treat small isolated patches and individual plants to keep noxious weeds from spreading. Treatment of large extensive areas of noxious weeds in woody draws with picloram would not occur. Due to the residual properties of picloram, spreading is deferred and treatment is not needed every year.

Treatment under trees on the Sheyenne National Grasslands is being accomplished with controlled droplet applicators using a very low rate of picloram. This treatment is based on similar research treatments in the early 1980's by personnel in the Department of Agronomy at North Dakota State University. These research treatments and the treatments on the Sheyenne have not resulted in any tree mortality. NDSU research on sandy soils in open grasslands has found no more than 25 parts per billion of picloram in the soil. Below the 24" level there was no detectable trace of picloram in the soil. The rates of picloram applied to this site was .25 lbs. per acre per year 1981 through 1985. Testing was accomplished in the fall of 1985. Similar tests were accomplished in heavier soils in western North Dakota with the highest concentration of picloram being 15 parts per billion with no detectable traces below the 12" level. The half life of picloram appears to be around 13 months so approximately one year after the cessation of treatments picloram residual in the soil would be even less. It is believed it would take 500 parts per billion of picloram to cause mortality of sensitive trees of sappling size and close to 1000 parts per billion to cause mortality of sensitive trees of mature size. These facts and figures are based on unpublished reports, published reports and conversations with Dr. Rod Lym, Agronomy Department, North Dakota State University.

C. Your concern for special areas is shared. There are many special areas across the Custer National Forst where broadcast control methods are not appropriate. Thus the hand application requirement. Neither do we feel it is wise to let noxious weeds spread unchecked in these areas by nontreatment. Many of the natural areas would lose these unique values if dominated by noxious weeds. The specific impacts on these areas will vary from area to area due to the type of noxious weed invading on the particular site and the type of control method (i.e., chemical, mechanical or biological). Site-specific treatments will be addressed in the environment analysis prepared for each Ranger District's annual programs. Whatever control method used will not alter the uniquiness of the special area.

D. It is our intent to observe the guidelines of the Threatened and Endangered Species Act and not to treat in areas of known unique plant species.

E. We, likewise, feel a commitment to continue our noxious weed program. We intend to continue all phases of the program with the funding we receive.

#22

NORTH DAKOTA
STATE DEPARTMENT OF HEALTH
State Capitol
Bismarck, North Dakota 58505

ENVIRONMENTAL HEALTH SECTION

1200 Missouri Avenue
Box 5520
Bismarck, North Dakota 58502-5520

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CUSTER NATIONAL FOREST

April 15, 1986

Mr. David A. Filuis
Forest Supervisor
Custer National Forest
P.O. Box 2556
Billings, MT 59103

Dear Mr. Filuis:

This Department has reviewed the Custer National Forest Environmental Impact Statement for the treatment of noxious weeds on lands administered by the U.S. Forest Service with regard to environmental impact. We are of the understanding that the proposed noxious weed management program will utilize chemical, biological, and mechanical control methods. The North Dakota State Department of Health believes that if properly administered, the management program proposed by the U.S. Forest Service will not adversely impact the environment. However, we have the following comments/suggestions regarding the application of herbicides and the burning of weeds as prescribed by the integrated management program: A

1. On page 9 of the document, reference is made to the fact that "many herbicides have restrictions near surface water and areas with high water tables." On page 32, the statement is made that "in areas known to be sensitive to herbicide impacts, such as groundwater recharge areas, further mitigation may be required or the proposed treatment may be dropped." As a means of reducing the potential for adverse impacts on the water quality of surface waters and groundwater, the Department recommends that the management program adopted by the U.S. Forest Service prohibits the application of herbicides in the immediate vicinity of any surface waters or groundwater recharge areas. B

2. The Department recommends that the program adopted by the U.S. Forest Service avoids the application of a herbicide when precipitation is likely within 24 hours. C

3. The Department recommends that the herbicides utilized be applied only by certified applicators. D

4. The Department suggests that greater emphasis be placed on the proper storage and disposal of all herbicide containers. As a minimum, empty containers should be triple rinsed, punctured and disposed of in an E

Environmental Enforcement 701-224-3234
Environmental Engineering 701-224-2348
Environmental Sanitation 701-224-2382
Hazardous Waste Management & Special Studies 701-224-2366
Water Supply & Pollution Control 701-224-2354

A. We appreciate your review of the Deis.

B. See reply to Letter #29, item B.

C. Due to the uncertain nature of weather patterns, the difficulty in determining exact precipitation times and with the strengthening of the paragraph concerning treatment in riparian areas, page 13, mitigation measures we feel there is no need to avoid herbicide application 24 hours prior to precipitation.

D. It is our intent to follow Federal and State regulations and laws concerning certification, licensing and application of herbicides (see DEIS, Chapter II, Mitigation Measures).

approved landfill. The rinsate should be used for the intended purpose of the herbicide according to label directions. E

5. Weed burning activities prescribed by the program are subject to the Air Pollution Control Regulations of the State of North Dakota. Advance approval of such burning activities must be obtained from the Division of Environmental Engineering of the North Dakota State Department of Health. F

The Department appreciates the opportunity to review and comment on your proposed noxious weed treatment program. If you have any questions concerning our comments/suggestions, please do not hesitate to contact us.

Sincerely,

Gene A. Christianson

Gene A. Christianson, Chief
Environmental Health Section

GAC/CDR:irr

E. State and Federal Regulations and laws will be followed concerning disposal of pesticide containers. We have added this requirement in the FEIS.

F. It is our intent to follow State and Federal laws and regulations concerning air pollution when using prescribed burning. The FEIS has been amended to incorporate this.

#24

United States
Department of
Agriculture

Soil
Conservation
Service

P.O. Box 1458
Bismarck, ND
58502-1458

April 23, 1986

David A. Filius
Custer National Forest
P.O. Box 2556
Billings, MT 59103

Dear Mr. Filius:

The Soil Conservation Service in North Dakota has reviewed the Custer National Forest Environmental Impact Statement for the treatment of noxious weeds on the lands you administer. We have the following comments: **A**

1. A discussion on existing range conditions found on the Custer National Forest and the potential for improving those range conditions to help control the weeds, in addition to a spray program, is needed.
2. On page 10, the section titled "Ecology of noxious weeds found on the Custer National Forest" might be more properly titled "some characteristics of noxious weeds found on the Custer National Forest". **B**
3. On page 14, Alternative 1 - no action, EC2 includes the statement regarding the invasion of noxious weeds (in general) of most, if not all, range sites regardless of condition is unfounded and probably should be reworded or withdrawn. **C**
4. In Appendix I and on page 8, Table II-4 the use of Picloram is indicated on grass/tree and grass/shrub, forest and riparian areas. Research showing the use of Picloram under woody vegetation, to be safe, is not available. Weed specialists at NDSU indicate that Picloram will eventually kill the trees in 4 to 5 years and may not control the spurge. We suggest not using Picloram at all under trees. **D**
5. On page 33 and 34, what specific precautions and actions will be taken near unique plant areas such as black cottonwood and limber pine? **E**

We appreciate the opportunity to comment on this draft environmental impact statement.

Sincerely,

ACTING

AUGUST J. DORNBUSCH, JR.
State Conservationist

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A. The range situation on the Custer National Forest is discussed in the draft Environmental Impact Statement for the Custer National Forest Land Use Plan. We refer you to that document. It should be published in final form in June 1986.

B. We believe "Ecology of Noxious Weeds" is appropriate for this section.

C. At the present time, we have noxious weds on areas of poor condition range and areas in excellent condition and also in areas protected from cattle use. We believe if left unchecked, noxious weeds have the potential to dominate most vegetative sites. See reply to Letter #29, item C.

D. See reply to Letter #22, item B.

E. At the present time we have not discovered any noxious weeds on U.S. Forest Service lands in the black cottonwood or limber pine areas of North Dakota. We would not treat any areas of unique species with any method which would remove these species from there habitat. We would consult research experts on how to treat, when to treat, etc. If treatment could not be achieved without mortality, the area would not be treated.

#25

April 23, 1986

NER NATIONAL FOREST 198

To: Forest Supervisor,
Mr. David Filius.

After Careful reading of the DEIS for noxious weed treatment on the Custer National Forest, I am left with more questions than answers.

Would the Chemical program take place before nesting season for birds and also early spring when young Animals are very Vulnerable? Surely these stands of weeds are not pure stands but do involve other growth attractive to birds and animals!

Do any wild animals utilize the noxious weeds to a great extent for food or Cover?

A

I found statements on Forest income and projected losses to the livestock industry from the noxious weeds but no Cost analysis of the different Control methods.

Is the Cost of Control going to be about the same, higher or much more costly than the impact on the grazing industry?

B

My experience with weeds is that every year, they are back so will this be a self perpetuating program?

C

The tables on page 74 only indicate one Kind of Control for the weeds. Would Biological ~~controll~~ Control not be Attempted?

D

I understand that sheep like to eat leafy spurge. Why not lease those areas to sheepmen and let Cows graze on other allotments?

E

When there is not enough money to keep the toilet at the

A. Due to the phenological make up of most noxious weeds, the most effective chemical treatment is in the late spring or early summer time period. Most birds have selected nest sites by this time and are nesting. In a recent study of the Greater Prairie Chicken on the Sheyenne National Grasslands, where the most serious noxious weeds on the Custer National Forest exists, a total of 36 nest sites were analyzed and not one had any noxious weeds as a dominant species. It is possible some minor amounts of noxious weeds occurred at some of these sites, but it is believed that most noxious weeds do not provide key habitat for nesting.

We do not know of any birds or animals on the Custer National Forest that use noxious weeds to any great extent. Some bird species eat the seeds produced by noxious weeds.

B. See response in Letter #2, item A.

C. The type of treatment used would determine the need for repeated treatment. For instance, when weeds are treated by mowing this only destroys the annual growth. Retreatment is required to have any long-term effect on the infestation. Herbicides offer the opportunity to kill the entire plant, including the roots, thus retreatment is less likely.

D. The tables on pages 74, 75 and 76 indicate biological, chemical and mechanical control methods.

E. Sheep use of leafy spurge does not control leafy spurge though sheep do utilize some varieties of this weed. At the present time, in some areas of the Forest, i.e., Sheyenne National Grasslands, there are not enough sheep in the area to utilize the amount of leafy spurge in the area. In the future, sheep may be used in some areas as the preferred alternative does allow for such use.

Why not lease those areas to sheepmen and let cows graze on other allotments?

When there is not enough money to keep the toilet at the Beartooth overlook open for 4 months a year, I question spending so many dollars for poison! F

I was pleased to note that the Service is aware that the recommended application is often inflated and would trust that if you do proceed with this program that you would use the weakest possible application to achieve the desired end. G

Sincerely,
Leon- Kathryn Hicks

F. Funding for the recreation program and the Noxious Weed Program are separate. Congressional appropriations determine the amount of funding available for each program and we are not at liberty to transfer funds from one program to another.

G. It is our intent to use the lowest rate of herbicide possible to achieve the desired results.

#26

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James Phelps
Reporter, Special Legislation
Yellowstone Valley Audubon Soc'y
2110 Bradbrook Court
Billings, Montana 59102

April 24, 1986

Mr. David A. Filius, Supervisor
Custer National Forest
Post Office Box 2556
Billings, Montana 59103

Dear Sir:

Please consider this as the comment of the Yellowstone Valley Audubon Society upon the draft Environmental Impact Statement (DEIS), Custer National Forest, Noxious Weed Treatment Program, dated February 1986.

The Yellowstone Valley Audubon Society is a local chapter of the National Audubon Society and a member chapter of the Montana Audubon Council. The chapter members, more than 400 persons, are for the most part in the area described by the name.

Defining "weed control" reminds one of the attempt to define "pornography." There are some quite obvious cases and at other times and locations what is a "weed" to one isn't a "weed" to another. Most of the worst weeds are foreigners, often introduced in hopes of providing better pastures or forage or escaped from gardens. Halogeton (Halogeton glomeratus) came in with sheep (Rosetta, 1977). There is plenty of blame to go around; now we must deal with the problem.

A We support "Alternative 4," the preferred alternative. "This alternative would meet the Forest's goal of implementing an integrated pest management program (DEIS, page 16)." But given the realities, can the goal be accomplished? Gramm-Rudman (whether or not the Supreme Court rules "favorably" or "unfavorably") is a fact; the Forest Service has been undergoing budget reductions for many of its activities for some time and we believe the trend will continue.

B The DEIS speaks bravely of: "Control (being) accomplished through a mix of chemical, mechanical, and biological treatments * * * (DEIS, page 15)." However, we are not making much progress with biological controls, and will have to rely on chemical control for the foreseeable future. The DEIS as much as makes this admission in the section discussing "Biological Control" (beginning on page 9). Part of the problem has to do with research. Only last year did a full-time person come "on board." Celestine Lacey was hired at the Montana Agricultural Experiment Station as state weed coordinator (Billings Gazette, November 11, 1985); funds derived from a tax on herbicides should help.

C The DEIS (page 33) states: "There are no known Federally listed threatened and endangered plants on the Custer National Forest." The U. S. Fish and Wildlife Service is so far behind with its listings that one shouldn't lean on that crutch. A recent publication (Lesica et al., 1984) lists vascular plants of limited distribution in Montana. Of 12 species endemic to the state considered as "rare," only one might be on the Custer; that one being Eriogonum pauciflorum var. canum. (Few-flowered buckwheat) (Ibid, page 37). Many other species listed are "peripheral" in Montana and not necessarily "rare" in other parts of their ranges. Nonetheless, consideration is needed in the overall management of the Forest lands.

A. We appreciate your support for alternative 4. We recognize the implications of further Federal spending cuts, but we prefer to have a conscientious treatment program ready to implement. We intend to accomplish as much as possible with the funding we receive.

B. We believe research for biocontrol agents is progressing. We are in continual contact with researchers in North Dakota and Montana and have requested the release of approved agents when they become available.

C Appendix H (Unique Plants) list has been expanded. Three new species added. The range of two species has been expanded to include Montana. We will be incorporating unique species as they are determined.

The DEIS (Appendix H, page 72) lists plants considered "unique" on the Custer National Forest. Only one, Betula paperifera, paper birch, is shown for Montana, and that species is shared with North Dakota. The publication by Lesica et al. will be a good addition to your other references. We can't believe there is only one "unique" plant on the Custer's lands within the state of Montana.

C cont.

"Alternative 4" provides for a multi-phased "attack" on "weeds." Not to be lost sight of is proper range management. The DEIS (page 4) points out that "Grazing management systems must be designed to maintain ranges in good or better condition in cooperation with a weed treatment program." Is it too much to ask for "excellent" condition?

D

Very truly yours,

James Phelps

References:

Cook, Tom. 1985. State declares war on weeds. The Billings Gazette, Monday, November 11, 1985.

Lesica, P., G. Moore, K. M. Peterson, and J. H. Rumely. 1984. Vascular plants of limited distribution in Montana. Monograph No. 2, Montana Academy of Sciences.

Rosetta, N. 1977. The weed control follies. Montana Outdoors 8:2-10. Jan.-Feb. 1977

D. The Forest's grazing program is further expanded in the draft Forest Plan. The term "good or better" implies that excellent range condition is certainly a goal.

NATIONAL WILDLIFE FEDERATION
Northern Rockies Natural Resource Center
240 N. Higgins, Missoula, Montana 59801
(406) 721-6705

#27

April 25, 1986

David Filius
Forest Supervisor
Custer National Forest
2602 First Ave. N.
P. O. Box 2556
Billings, MT 59103

Dear Mr. Filius:

Enclosed please find the National Wildlife Federation's comments on the Custer National Forest Noxious Weed Control Program DEIS. We have serious reservations about the adequacy of this document as it pertains to monitoring, wildlife protection, and grazing management. We feel it is particularly important for a forest-wide DEIS to address specific impacts and alternatives and not to rely solely on other, broader, federal agency documents.

We appreciate the opportunity to comment on this DEIS and look forward to the incorporation of our comments and recommendations in the final EIS.

Sincerely,

Thomas France

Thomas France, Esq.

Tamzin Brown

Tamzin Brown, Legal Intern

APR [illegible]
CUSTER [illegible] FOREST

SUPERVISOR
DEPUTY
ADMIN
Ofc Srv
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COMMENTS ON THE NOXIOUS WEED TREATMENT PROGRAM

Custer National Forest

The Custer National Forest Draft Environmental Impact Statement (DEIS) proposes a deliberate misreading of the Federal Land Policy and Management Act (FLPMA) and the Public Rangeland Improvement Act (PRIA) which is indicative of the tone of the entire DEIS. (Text at 1). Both FLPMA and PRIA call for an improvement in rangeland, of which weed control through chemical, mechanical, and biological treatment methods is a PART. Neither Act foresees these methods as the sole means for increasing range productivity; rather, the Acts envision an integrated program of range management which would include implementation of better grazing management systems. The DEIS' only mention of implementing better grazing management systems is one passing reference to "items that are known to be of interest." (Text at 4). This grossly inadequate "discussion" of the need to combine better grazing practices with the weed treatment program only underscores the DEIS' failure to address the causation of weed infestation.

A

A. The intent of the DEIS is to outline and implement the treatment of noxious weeds upon the Custer NF. The listing of laws under which we must abide is provided in the DEIS to inform the reader of such statues. There are many facets to each of the laws and the synopsis provided is accurate in regard to noxious weed treatment. The total rangeland management program is addressed in the draft Forest Plan due for final release in June. Our Forestwide goal for rangeland management is briefly stated as "rangeland in good condition". The achievement of this goal includes the improvement of grazing practices, as well as treatment of noxious weeds and other land improvement and protection measures.

The DEIS must include a discussion of conditions which predispose an area to weed infestation (overgrazing, fires, intentional and unintentional introduction of weed seeds by humans, and poor land management practices which accelerate soil erosion), since eliminating or controlling these factors is essential to controlling noxious weeds.

Further, since the DEIS fails to address the problem of causation in weed infestation, it seems inevitable that the Forest

B

B. We recognize that site disturbing activities such as fires, timber harvesting, road building, overgrazing, and unintentional introduction of weed seeds by humans or livestock increases the liklihood of noxious weed establishment and spread, and have so added this information to the FEIS. Consequently, the potential for noxious weed invasion as a result of management activities is analyzed through project level analyses. Such analyses discuss mitigation measures to control weeds, such as the Stillwater Mining Co. EIS-December 1985. Requirments often include measures such as weed-free seed on rehabilitation projects, weed-free feed supplement for backcountry and wilderness use, and activity financed noxious weed treatment (KV) measures. We have included these preventive measures in the FEIS.

is bound to repeat its mistakes in allowing overgrazing by livestock and continued importation of weeds through human agency. Where the sources of weed infestation go unchecked, the use of herbicides and other weed treatment programs will be necessary on a continuing basis. Thus, the potential for herbicide residue buildup (particularly with picloram) following repeated applications and the expected impacts on soil and water quality, as well as on the wildlife communities, must be addressed. This is particularly important in this Forest since most of the districts are in arid to semi-arid environments where residue buildup may well exceed the rate of dissipation.

B cont.

Grazing

The DEIS must address the need to implement livestock management after the infested areas have been treated. This should include an evaluation of areas which need to be withdrawn from livestock grazing in order to effectuate a lasting treatment program.

C

C. The need for livestock management on any given area of the Custer NF is analyzed through the Allotment Management Plan which establishes the needed activity to achieve a desired goal. Removing livestock from an area treated for noxious weeds may or may not be warranted. See reply to Letter #29, item **C.**

The DEIS should attempt to balance wildlife and livestock vegetation needs. How do the wildlife benefits of mixed grass, forbs and shrubs compare to grazing benefits? The present emphasis of the DEIS is to improve rangeland for livestock (who initially contributed to its decline) at the expense of a diverse grass, forb, shrub and tree community which is essential for a healthy eco-system and for wildlife habitat needs.

D

D. We agree there needs to be balance among users of the Forest lands. We have strived to propose such a balance in the draft Forest Plan. Again, the intent of this EIS is to propose a strategy for noxious weed treatment and disclose environmental consequences and human health risk, not establish a total rangeland management program. The detrimental effects of noxious weed infestation to wildlife habitat and range condition is well documented. See the Reference Section in the EIS, particularly Spoon-et al, French et al and Lym et al. We feel noxious weed treatment is only a PART of rangeland management which requires unique analysis due to the risks taken with herbicide applications.

Water

The DEIS' analysis of the impacts of herbicides on water quality is weak at best. Groundwater impacts are not discussed

L

with any supporting data. For instance, what are the effects from the continued use of picloram, which is persistent and highly mobile in nonorganic soils? Mere reference to studies of runoff in Canada (where? Prince Edward Island? Southeastern Alberta?) is scarcely a sufficiently detailed analysis which would allow either the reader or the agency to make an informed decision as to the use of herbicides in the Custer National Forest.

The agency cannot proceed with this program on such lack of information. The National Wildlife Federation therefore proposes that another DEIS be issued which contains the analysis of herbicide persistence and buildup in the surface waters, groundwater and soils of the Custer National Forest. This would involve a discussion of absorption, leaching, and runoff in arid and nonorganic soils - rather than the generic discussion of herbicide behavior in moist, organic soils which presently monopolizes the text. (See generally Appendix G).

E cont.

Monitoring

The DEIS lacks any discussion of past or future monitoring studies which have been or will be conducted on native vegetation in order to ensure a flourishing and diverse vegetative community. How will the effectiveness of the treatment program be monitored? What efforts will be made to monitor and mitigate soil erosion on defoliated areas? The DEIS should indicate what type of follow-up reseeding program the agency will follow in order to re-establish native vegetation in the treated areas.

F

Wildlife

E. The analysis of soil and water characteristics in response to herbicide application is contained in Appendix G. There are numerous references throughout this appendix. One important reference was, however, omitted in the appendix (but is listed in the Reference Section) is the USDA Pesticide Background Statements, Vol. 1, Herbicides, Agriculture Handbook No. 633, August 1984. This reference has been added to the FEIS. Additonally, a supplement discussion has been added to Appendix G. See the FEIS, Errata.

F. In order to establish the knowledge of infestation levels and to elevate the concern for public awareness, the Forest conducts various range analyses, including kill plots for treatment effectiveness. We share your concern for a flourishing and diverse vegetative community. The monitoring program for all activities is established in the draft Forest Plan. However, we have included the specific noxious weed monitoring requirement in the FEIS.

The discussion of herbicide impacts on wildlife is unacceptable. (Text at 35). Mere recitation of generalized non-statements from the BLM and DEA do not satisfy the National Environmental Policy Act's requirement of responsibly analyzing reasonably potential adverse impacts before fedaral action is undertaken. 42 U.S.C. Section 4332(C)(1982). G

The DEIS insists that destruction of key wildlife habitat is "insignificant" (text at 35) and "short term" (text at iv, 17, 35). However, the DEIS fails to consider that tha noxious weed treatment program and its adverse effects on wildlife will not be "short term" if the causes of the infestation problem are not corrected. Further, since the treatment programs are all designed to take place during the weeds' bud and early bloom stage (text at 10-12), i.e. spring and early summer, there will be a very significant destruction of food and shelter sources for wildlife. The National Wildlife Federation fails to see how destruction of key habitat by non-selective herbicides (those designed to destroy all broadleaf plants) and/or spring burns is "insignificant." H

Wildlife is not merely displaced if their habitat is altered or destroyed, since adjacent habitat is already at its natural carrying capacity and cannot support additional wildlife. The DEIS must seriously address the adverse impacts on wildlife and fish both from destruction of non-target vegetation and from the direct effects of herbicide ingestion, inhalation and absorption through the skin. The National Wildlife Federation also recommends that herbicide applications and prescribed burns be timed so as to avoid nesting, fawning/calving and apawning periods. I

G. A biological assessment has been prepared and transmitted to US Fish and Wildlife Service. The sensitivity of nontarget vegetation is noted throughout the document.

H. See reply to item B, above. Additionally, we agree that non-selective herbicides would have their greatest effect on nontarget forbs and shrubs during spring and early summer. Consequently, the mitigation measures are offered to limit the amount of undesireable vegetation fatality. (See Chapter II, Mitigation Measures.)

I. See reply to Letter #25, item A

Evaluation Criteria

The DEIS states that the following criteria will be used to evaluate the proposed alternatives (text at 5):

> "2. The proposed action should meet the intent of the Forest's range management objective of improving overall vegetative condition.
>
> 3. The proposed action should not significantly adversely affect identified key wildlife and fisheries species habitats.
>
> 5. The proposed action should not significantly adversely affect nontarget vegetation (forbs, shrubs, and trees).
>
> 6. The proposed action should effectively limit the spread of noxious weeds on Federal lands and prevent spreading to adjacent lands."

Criterion 2 - As noted above, none of the proposed alternatives discuss the use of grazing management systems in conjunction with the weed treatment programs; thus, none of the proposed actions meet the Forest's range management objective of improving overall vegetative condition since one of the primary causes of range deterioration is never addressed. J

Criteria 3, 5- None of the proposed actions meet the objective of "not significantly adversely affecting" key wildlife habitat (nontarget vegetation). First, all herbicide treatment is proposed for use during the weeds' bud and early bloom stage, i.e. spring and early summer. (Text at 10-12). These treatment programs will obviously compete with critical periods in fish and wildlife life cycles, since K

J. See reply to item A, above.

K. The DEIS discussion on Impacts to Wildlife and Fish adequately identifies the risk associated with a noxious weed treatment program.

these seasons not only are important for birthing and rearing of young, but also for replacing food reserves lost during winter. K

Second, the minimum persistence of herbicides in the soil is anywhere from one month for 2,4-D to one year for picloram. (Text at 7). These minimum figures are projected for highly organic, moist soils (text at 30, 68) - soils which, with the possible exception of areas within the Beartooth District, are not present in the project area. (Text at 20-12, Appendix G). It is therefore highly likely that persistence in Custer National Forest soils will in fact be much longer. Even given the minimum of a one-month loss of habitat in the spring or early summer, the effect on wildlife is potentially devastating. This lack of concern for wildlife values is a major flaw in the proposed noxious weed treatment plan. L

Criterion 6 - By stating that the proposed action should limit the spread of weeds from federal lands to adjacent (nonfederal) lands, the DEIS obscures and oversimplifies the problem of weed infestation. Federal lands are neither the initial nor the sole starting point for weed infestation - weed seeds were brought in by human visitors and on vehicles, by privately owned livestock, as well as from wind, fire and water movement. The spread of weeds is at least as much from nonfederal lands onto federal lands as it is vice verse. While it is commendable for the Forest to be concerned with noxious weed infestation M

L. To draw the conclusion that all key wildlife habitat is lost for at least a period of one month is erroneous. The areas selected for treatment are analyzed for potential impacts to all resources of the land. See reply to item H, above and reply to Letter #22, item B.

M. See reply to Letter #2, item B. Additionally, we have added preventive measures in the FEIS.

from its lands onto others' lands, it does not further the goal of weed control to ignore the sources of weed infestation from outside federally owned lands.

M cont.

CONCLUSION

The DEIS is primarily inadequate for its lack of individual assessment for effects on the environment within the Custer National Forest. The document relies almost exclusively upon the data and conclusions of the BLM's regional noxious weed plan and the DEA's national EIS on the eradication of cannabis. No further research was conducted on Forest lands. This does not meet the National Environmental Policy Act's requirement of evaluating federal agency action in a site specific manner before undertaking significant federal action. The DEIS is meant to be a planning and decision-making document, and is emphatically not meant to support preconceived strategies for land management.

N

N. Research on noxious weed control has been ongoing on the Custer NF for a number of years, primarily on the Sheyenne National Grassland in eastern North Dakota. Much of the research data obtained by NDSU, Fargo, ND, has been affected on Custer lands. See reply to Letter #22, item B.

The DEIS is extremely short-sighted in its view of noxious weed control. It does not address the cause of weed infestation. It does not address the major role overgrazing plays in reducing native plant vigor and increasing soil erosion through loss of dense grass cover.

O

O. See reply to item B, above.

The National Wildlife Federation proposes that each alternative in the DEIS should incorporate the objective of improved grazing management systems (such as rest-rotation and reduction of AUM's). The DEIS should also include a section on monitoring the effects of the treatment program, including the

P

P. See reply to item A and B, above.

effects on water quality, soil erosion and wildlife habitat interference. The DEIS must be revised to reflect a program of preventative maintenance which will control weed infestation and regain the health of public grass and forest lands. P cont.

#28

RECEIVED
APR 28 1986
CUSTER NATIONAL FOREST

AUDUBON SOCIETY
of
FARGO-MOORHEAD

April 25, 1986

David A. Filius, Forest Supervisor
Custer National Forest
P. O. Box 2556
Billings, MT 59103

Dear Dave,

We commented earlier, during the scoping period, but were too late then to have received consideration in the draft Noxious Weed EIS preparation process. We are pleased to see however that most of the concerns we held important were covered by the draft. A

We support the FS proposed action alternative, an integrated pest management approach, but feel that a few items in the draft should receive more emphasis in the final plan, and hope you will consider our comments favorably: B

1. We still believe that the EIS should contain bibliographies of the technical and scientific research available for each type of control considered (especially where ecological effects of herbicides are studied) and for the biology of the plants being controlled. We believe this is essential, in order to assure the public that the FS has conducted a complete and comprehensive study of this problem.

For example, see p.32, "Impacts on Ground Water," 3rd paragraph, "Although little information exists, ..." We believe that the little information existing did lead you to form important conclusions. We would like to know what you're reading. C

2. Much more attention should be given to preventing weed-spread. The plan should include a detailed discussion of how this can be accomplished, and include an analysis of domestic livestock grazing impacts on the spread of weeds.

For example, if FS Rangers know or believe that infestations result from seed-contaminated hay being fed in a specific project site, put it in writing. D

3. We believe that in many cases the use of chemical controls should only be considered as a last resort, expecially where mechanical methods have not been tried on a particular project area. We think the preferred alternative should require that cost comparisons be made for the use of volunteer or low-cost (mechanical) labor and chemical control for each project area, or at least that a threshold requiring such comparisons be established. E

4. Where chemical control must be resorted to, we request that installation of ground water monitoring wells be planned downgradient F

A. We appreciate your response during our scoping process.

B. Thank you for your support of alternative 4.

C. The DEIS bibliography contains technical and scientific research applicable to each control measure (see References section of DEIS). The primary reference for soil and water impacts from herbicides came from the USDA publication, Pesticide Background Statements, Vol. 1, Agriculture Handbook No. 633, 1984.

D. You and other commentors noted our oversight. Preventive measures have been added in FEIS, Errata. Thank you.

E. We share your concern for economic efficiency, balanced against environmental consequences and proper land management. Our experience has shown that manual/mechanical methods can be effective particularly with single plant infestations. When weed pulling can be done as a part of other field work, it is very cost efficient. Labor intensive methods for larger infestation is simply not reasonable. Some species of weed only reappear or proliferate when physically disrupted.

of several selected weed patches and that these be maintained for a reasonable time after control is achieved. We believe that it is an applicator's responsibility to provide the public with proof that environmental damage is not being done, rather than the other way around.

F cont.

5. We assume that the FS currently uses some variation of a system of site analyses of the many types of infestations. This system would catalog sites according to weighted parameters. The parameters to consider should include size, concentration, and geography of an infested site, its proximity to water, soil type, and current cultural practices, the presence of other plants and animals which may warrant special considerations, and control alternatives.

Perhaps something like the above is being used by the FS currently. If so we believe it should be detailed in the final plan.

G

6. One of our members once observed some barrels of 2,4-D sitting in an open field in the Sheyenne National Grasslands. Such incidents raise the question of accidental contamination of soil and water, etc. by mishandling, improper storage, or vandalism of herbicides. While we assume the FS manuals and field guides are written and followed in order to insure reduced likelihood of contamination, we feel that analysis of the possibility and effects of accidents involving herbicides should be addressed in the final plan.

H

FOR THE AUDUBON SOCIETY OF FARGO-MOORHEAD

John Lamb

John Lamb, Conservation Co-Chairman
1204 S. University Drive
Fargo, ND 58103-3144

F. We feel satisfied that with our recommended program's applicator rates we will not be creating unacceptable impacts to ground water. The Red Lodge Municipal Watershed (Beartooth Mtn>) will receive a separate environmental assessment in 1987. The Sheyenne Range District is currently in consultation with North Dakota State University to initiate a program to monitor wells for herbicides. NDSU research data has shown that picloram has not been leached below 12" on stony or silty loams or below 24"on fine sandy loams with application rates of 1/4 lb A.I./acre picloram (unpublished-personal communication Rod Lym-NDSU).

G. We recognize the need to tailor specific treatments for specific areas, although site analysis addressing infestation size, concentrations, and geography are considered within the proposed program. Proximity to water is analyzed and influences treatment strategies (see Chapter II, Mitigation Measures). As annual programs are developed on each Ranger District, these specifics will be addressed.

H. We share your concern. We have added the handling precautions that are required by State laws to the FEIS.

#29

United States Department of the Interior

OFFICE OF THE SECRETARY
OFFICE OF ENVIRONMENTAL PROJECT REVIEW
Denver Federal Center, Building 67, Room 488
P.O. Box 25007
Denver, Colorado 80225-0007

IN REPLY REFER TO:

April 24, 1986

ER 86/350

David A. Filius
Forest Supervisor
Custer National Forest
P.O. Box 2556
Billings, Montana 59103

Dear Mr. Filius:

The Department of the Interior has reviewed the Draft Environmental Impact Statement (DEIS) for the Noxious Weed Treatment Program on the Custer National Forest and offer the following comments:

General Comments

The DEIS outlines reasonable precautions for preventing damage to desirable plants and native fauna. That some damage could occur due to unforeseen events is recognized. It is generally concluded that elimination of noxious weeds would improve wildlife habitat. This is true to the extent that desirable forbs are not killed along with the noxious weeds. Furthermore, forbs that are noxious because they displace livestock forage plants may be desirable if they produce seeds or provide cover important to wildlife. Any positive values of the target species should be noted. A

We are concerned that herbicides may enter streams and damage aquatic life. This possibility is increased by plans to apply herbicides all the way to the water's edge and maybe beyond. The use of mechanical eradication methods only within 50 feet of any wetland or water body would prevent damage to aquatic communities from the herbicides. B

No discussion of the correlation between overgrazing and the incidence of noxious weeds was found. Because such correlations usually exist, it appears that reduced grazing pressure would be a preferred strategy. C

There is no description of the fauna other than a listing of key species. It is not possible to determine the effects of herbicide applications if the fauna is not known. A listing of endangered and threatened species is especially needed. D

A. We share your concern and certainly have no intent of treating plants with this program that are not identified as "noxious" by State law.

B. We have corrected the text in the FEIS to exclude any herbicide introduction to open water, either surface, standing, running or water that recharges an underground acquifer.

C. We have adjusted the text in the FEIS to indicate the correlation between range condition and weed infestation. Grazing is not considered to be a primary cause of spreading noxious weed considered to be of most concern (spotted knapweed and leafy spurge). District personnel and researchers at the Rocky Mountain Range Experiment Station (RMRES) and Montana State University have found no correlation between grazing systems or range conditions and leafy spurge or spotted knapweed infestation levels. Noxious weeds are found thriving within areas excluded form livestock grazing. Researchers at the RMRES have found correlations between range sites and leafy spurge infestation levels only (personal communication with Ardell Bjugstad).

D. A listing of Threatened and Endangered species and effects of proposed action on these species outlined in "Biological Assessment For The Noxious Weed Treatment Program". A summary of this assessment is added under Chapter IV, Impacts on T/E Animals.

Specific Comments

Page 4, column 2, paragraph 2 ("4. Grazing management . . . ."). This concern implies a relationship between grazing pressure and noxious weed prevalence. No examples were found, however, that the concern was translated into the plan. E

Page 13, column 2, line 8 ("precautions. Generally, no . . . ."). This statement suggests that there may be times when herbicides will be introduced directly into open water. It should be noted under what conditions such introductions would be made and what environmental effects could be expected. F

Page 35, column 1, line 7 ("weeds would be prevented . . . ."). This statement is only partially true. Some of the noxious weeds--e.g., goatweed--may be of value to some species of wildlife as food or cover. G

Summary Comments

Should it be determined that the proposed action may affect an endangered or threatened species, the Forest Service should request initiation of formal consultation pursuant to Section 7 of the Endangered Species Act. H

It is recommended that prior to initiating any noxious weed control project near Department of the Interior lands the agency administering those lands be notified. Also, the National Park Service (P.O. Box 25287, Denver CO 80225) would appreciate a copy of the Record of Decision. I

The Department of the Interior appreciates the opportunity to comment on this DEIS.

Sincerely,

Robert F. Stewart

Robert F. Stewart
Regional Environmental Officer

E. See reply to item C, above.

F. The statement was in error. See reply to item A. above.

G. We will be making site-specific determinations at the time of annual program development on each Ranger District.

H. See reply to item D, above.

I. Be assured that we will continue interagency coordination. We will include the NPS office on our mailing list.

#30

STATE OF MONTANA
DEPARTMENT OF AGRICULTURE
OFFICE OF THE DIRECTOR
AGRICULTURE/LIVESTOCK BLDG.
CAPITOL STATION
HELENA, MONTANA 59620-0201

TED SCHWINDEN
GOVERNOR

TELEPHONE:
AREA CODE 406
444-3144

KEITH KELLY
DIRECTOR

April 24, 1986

Mr. David A. Filius
Forest Supervisor
Custer National Forest
P. O. Box 2556
Billings, MT 59103

Dear Mr. Filius:

The state of Montana has reviewed the Draft Environmental Impact Statement (DEIS) on the Custer National Forest Noxious Weed Treatment Program. The enclosed comments reflect the concerns of Montana's Interagency Planning Task Force regarding the program.

We appreciate your agency's attempts to deal with the noxious weed problem and we support the use of all feasible methods to control noxious weeds on the Custer National Forest, as described in the preferred alternative.

We look forward to your consideration of our comments and your response to them in the final EIS. Thank you.

Sincerely,

Keith Kelly
Director

JEL/weedltr.ws
Enclosure

An Affirmative Action/Equal Employment Opportunity Employer

Thank you for the opportunity to review the Custer National Forest Noxious Weed Treatment Program DEIS. The DEIS provided an objective discussion of the environmental and economic impacts that may result from each of the alternatives.

We generally support the preferred alternative (Alternative 4), which emphasizes integrated pest management (IPM). Montana has a serious noxious weed problem. Early detection and treatment of invading weed species is essential for successful weed management on forests and rangeland. Judicious use of herbicides will be required pending the development of more sophisticated biological and mechanical control methods. Existing biological, mechanical and cultural control methods should be used where appropriate. The eradication of spot infestations and the control of larger infestations are appropriate goals. A

A. Thank your for your support of alternative 4.

1. Effectiveness of weed control methods. While the DEIS addresses the relative effectiveness of biological control, the effectiveness of other control methods needs more discussion. Other control methods like intensive grazing management, revegetation, sheep grazing, hoeing, or hand pulling are discussed either briefly or not at all. B

B. We believe that the effectiveness of mechanical and biological methods is analyzed in the DEIS, particularly through alternative 5. We have added an explanation in the FEIS regarding manual treatment.

The DEIS should recognize the limitations of herbicide applications and other control methods. Many factors can affect herbicide performance. Applications must be timed to correspond with vulnerable stages of plant growth and development. Weather conditions before and after treatment can influence the amount of C

C. We recognize that various factors can affect herbicide performance. The selected alternative does address this concern by prioritizing treatment areas. One of the guidelines for selecting a priority area is to improve the effectiveness by taking advantage of climatic and seasonal conditions (see Chapter II, Description of Alternatives). Additionally, we have identified the appropriate time for herbicide application for the noxious weeds (see Chapter II, Ecology of Noxious Weeds Found on the Custer NF).

herbicide that is absorbed through the leaves. Soil texture, temperature, moisture and acidity (pH) can affect growing conditions and the persistence of herbicides in the soil. C cont.

Repeated mowing or tillage operations may eventually control certain perennial weeds, but may also contribute to the spread of weeds. Burning may be combined with herbicide treatment or revegetation to control weeds. However, mechanical treatments or burning are not generally effective for large scale weed control efforts. Areas disturbed by tillage or burning and sites disturbed by logging, road construction or oil exploration should be revegetated quickly to prevent weed invasion and to reduce soil erosion. D

D. We recognize the importance to combine methods for effective treatment. This is why we prefer an integrated program. See reply to Letter #13, item D.

The DEIS should contain a discussion of intensive range management as a deterrent to noxious weed invasion. The possibility of using grazing management to improve range condition and to provide increased plant competition with noxious weeds should be investigated. E

E. Management concern #4 addresses the use of grazing management systems to maintain ranges in good or better conditions (see ChapterI, Issues, Concerns, and Opportunities). See reply to Letter #29, item C.

The discussion of the effects of sheep grazing for leafy spurge control is inadequate. Montana State University researchers have had excellent results using sheep on leafy spurge infested rangeland and have therefore recommended the use of sheep for controlling large infestations. F

F. We have been in control with MSU and ARS researches primarily in regard to knapweed and biocontrol. Our Montana infestation of leafy spurge does not yet appear large enough to support treatment by sheep.

The DEIS should include a section on manual weed control methods G such as hand pulling or hoeing weeds from a site. Manual methods are effective on several of the weeds that are listed in the DEIS, especially in newly established infestations with a small number of plants.

G cont.

G. It was an oversight not to include manual weed control methods. A discussion has been added to the FEIS.

2. Prevention of weed infestations. The best method of weed management is to prevent the initial establishment of weeds. Weed prevention techniques should be used in all areas of the forest. All heavy logging, road construction or oil exploration equipment (ie. skidders, yarders, tractors, drilling rigs, etc.) that operates on Forest Service land should be washed before entering a site to remove weed seeds. Newly constructed roads should be closed to public use until permanent vegetative cover is established along roadsides, and off-road vehicle use should not be allowed on weed-free areas. All disturbed sites should be revegetated.

Immediate action should be taken to prevent noxious weeds from invading back country and wilderness areas. This includes controlling weeds along roadsides and trailheads, educating users about noxious weeds, and allowing only certified weed-free feed for animals to be taken on Forest Service land.

H

H. It was an oversight not to elaborate on preventive measures for noxious weeds. They have now been added. Thank you.

3. Public information and education. The Forest Service should establish a strong, long term weed education program and address this educational effort in the DEIS. Programs on weed identification and control for all field personnel, and a weed education and awareness program targeted at the general public

I

I. See reply to Letter #13, item E.

are needed. Public notification of herbicide applications in developed recreation sites should be expanded to emphasize the weed problem. In addition to being informed that an area has been sprayed, the public should know why.

Public information and education activities might include weed identification publications, posters, public service announcements and other educational efforts to increase public awareness of the weed problem. Informed citizens could also provide a good source of information about weed infestations on Forest Service land.

I cont.

4. Environmental concerns. The statement on page 13 of the DEIS, that "Generally, no herbicides will be directly introduced into water" is not adequate. None of the herbicides that are considered in the DEIS can be introduced into water except when they are specifically labeled for aquatic weed control. Most pesticide labels contain environmental precautions that prohibit application to water. Labeling precautions that prevent the contamination of groundwater must also be observed, as noted in the DEIS. Potential problems associated with spills and application of herbicides near water should be considered before a project begins. In general, compliance with mitigation measures in the DEIS adequately deal with preventing drift into water.

J

J. See reply to Letter #29, item B.

Personnel charged with control of noxious weeds should review

K

state regulations concerning proper disposal of pesticides and pesticide containers. Any waste products should be disposed of in accordance with applicable state regulations.

Forest Service applicators must choose the most appropriate herbicide for each individual site. All labeling directions and precautions must be carefully followed. When choosing among different herbicides, their persistance and mobility in the environment and their toxicity and hazard to fish and wildlife should be considered. If two or more herbicides are equally effective against target weeds, the product with the least potential for environmental damage should be used.

K cont.

K. All projects will be supervised or carried out by certified personnel trained in application and handling of herbicides. This certification training includes disposal, thorough knowledge of the herbicides and their effects on the environment. (See Chapter II, Mitigation Measures.) We have added a requirement in the FEIS to follow State regulations for wast disposal.

5. Cooperative weed control. The noxious weed list should be expanded to include those weeds listed by the Montana Department of Agriculture. Although all weeds on the list need not be considered high priority or targeted plants, management criteria for detection and management of all these species should be addressed. This will help coordinate the Custer National Forest noxious weed treatment program with county noxious weed management plans.

L

L. See reply to Letter #15, item B.

Coordinated weed control projects involving all adjoining landowners are essential. The Custer National Forest Noxious Weed Treatment Program Final EIS should commit to cooperative weed control efforts with local weed boards, conservation districts and adjoining public and private landowners.

M

M. See reply to Letter #15, item G.

#31

Billings, Montana
April 25, 1986

Forest Supervisor
Custer National Forest
P. O. Box 2556
Billings, MT. 59103

Dear Sir:

Following are our comments on your February, 1986 Noxious Weed Treatment Program EIS.

Although we would rather not use chemicals in the environment, we recognize that some noxious weeds cannot be controlled effectively without them. Therefore, we favor Alternative #4.

We are pleased that no aerial spraying will be done, and that the low persistent chemicals to be used will not leach into streams or have any significant adverse effects on people, wildlife, or non-target organisms. A

We urge that more research be conducted to develop better nonchemical weed control methods to reduce the future need for chemicals.

Overgrazing, off-road vehicle and people use, domestic and wild animals and birds, soil disturbance, etc., all spread weed seeds or allow weeds to establish. Some farmers and ranchers blame recreationists -- primarily hunters -- for their weed problems.

We would like to see a detailed discussion in the FEIS of where weeds come from, how and why they establish and spread, how to identify and control infestations early, and how individuals can contribute more to the solution rather than the problem. Since weeds are becoming a serious problem, more information should be distributed to the public through public education programs.

In the interest of reducing the spread of weed seeds, we suggest that all livestock be quarantined for 12 hours (longer if necessary to allow alimentary tract evacuation) and fed only certified weed free feeds, before they are allowed to enter the forest, and that only certified feed be carried and fed to livestock in the forest. B

Since all lands are subject to noxious weed proliferation, it is important that the Forest Service again coordinate with the County Weed Control Boards pursuant to the Carlson/Foley Act, or any other mechanism to get the overall weed problem under control and the job accomplished. C

We appreciate the opportunity to comment.

Sincerely yours,

Paul F. Berg

Paul F. Berg, Legislative Committees
Billings Rod and Gun Club, and
Southeastern Sportsman Assoc. *
3708 Harry Cooper Place
Billings, Montana 59106

* Representing 9 clubs and 5,000 Southeastern Montana Sportsmen

A. We appreciate your support of alternative 4.

B. To describe where noxious weeds come from is difficult to establish as the seeds or other plant parts can migrate into or invade an area by a variety of means. These include non-man caused factors such as wind, water and wildlife. Man caused introductions occur by vehicle, hay importation or livestock movement.

It was an oversight not to elaborate on preventive measures which have now been added to the EIS.

C. Forest Service weed treatment efforts are coordinated with adjacent landowners and local weed boards. (See Chapter II, Description of Alternatives.)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
ONE DENVER PLACE — 999 18TH STREET — SUITE 1300
DENVER, COLORADO 80202-2413

#32

MAY 2 1986

Ref: 8PM-EA

Susan M. Zike, EIS Team Leader
Custer National Forest
P.O. Box 2556
Billings, Montana 59103

Dear Ms. Zike:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, the Region VIII office of the Environmental Protection Agency (EPA) has completed its review of the Custer National Forest Noxious Weed Treatment Program, Draft Environmental Impact Statement (DEIS).

We note that the preferred alternative, Alternative 4, is an integrated pest management (IPM) approach to attaining noxious weed control on the Forest. Alternative 4 presents an environmentally acceptable approach in that the proposed application rates are at a level designed to control the spread of the various weeds rather than attempt to, though maximum allowable application rates, eradicate them. In addition, the proposed application methods e.g., net area control by surface vehicle and backpack sprayers will allow a greater degree of control than conventional aerial spray methods.

EPA has the following concerns/comments which should be addressed in the final Environmental Impact Statement (FEIS):

A

1. It would appear that the 50 foot riparian area buffer zone discussed in the DEIS is sufficient to protect the introduction of herbicide into adjacent streams. However, picloram at levels as low as 100 ppb in irrigation water has been shown to reduce yields in some crops (refer to "Pesticides in Soil and Water", 1974 Soil Society of America). Applicators in or near riparian and wetland areas must be cognizant of the importance of avoiding the direct introduction of herbicide into open water.

2. In some instances certain riparian and wetland vegetation may be highly susceptible to the accumulation effects of herbicides. Buffer zone design should be closely coordinated with the State to ensure maximum protection of these areas.

B

3. The prescribed application rates and proposed exposure times to applicators discussed in the DEIS provide a significant safety margin to personnel handling the herbicides. We reccommend the Edward C. Moning report; "Analysis of Human Health Risks of USFA Forest Service Use of Herbicides to Control Noxious Weeds in the Northern Region" be used during applicator training to increase the understanding of carcinogenic and other chronic effects of herbicide contamination in humans.

A. We share your concern over the persistence of picloram in soil and water. We have adjusted our explanation regarding its use in the FEIS. See reply to Letter 25, item B. You may also refer to the reply to Letter 29, item B.

B. Mr. Monnig's report is an Appendix to this document (J) and is currently being used in Forest Service training sessions. He is also assisted in the analysis for the Custer's Environmental Impact Statement and is available to assist any Forest in the Region.

4. Since the intent of the preferred alternative is control rather than eradication, we suggest the DEIS contain a discussion of anticipated re-treatment requirements. C

5. The Mitigation Measures section should be expanded to discuss monitoring and contingency programs. Monitoring requirements should assure that effects of herbicide treatment on terrestrial and aquatic ecosystem is measured. Hazard levels of application should be described. Please include in the FEIS contingency plans, coordinated as necessary with local health agencies, for spills, excessive application, or accidental misapplication. D

Based on our rating system for environmental impact statements we are assigning this DEIS a rating of EC-2. This means that our review has identified environmental impacts that should be avoided to fully protect the environment. We feel that additional information, as noted, will further reduce environmental impacts. If you have any question please contact Mike Hammer of my staff, at (303) 293-1716 or FTS 564-1716.

Sincerely,

Dale Vodehnal

Dale Vodehnal, Chief
Environmental Assessment Branch
Policy and Management Division

cc: Willian Dickerson, A-104
Kerry Clough, ARA-8PM

C. Retreatment is difficult to address in a Forestwide perspective. The actual effectiveness of any treatment is not realized until the following growing season and many conditions affect the results, thus making it difficult to predict. An annual environmental analysis will made prior to any treatment program on a Ranger District and the effectivness of the previous year's program will be a part of this analysis.

D. See reply to Letter 2, item C.

Appendix B

Page 50, Table B-2, Reference for NOEL data column. The Federal Register date 3/15/86 has been changed to 3/16/86.

Page 50, left column, paragraph 2. This paragraph has been deleted and the following paragraph replaces it:

> The NOEL of 10/mg/kg/day reported for glyphosate on Table B-2 is based on a three-generation reproduction study in rats. This NOEL was based on observations of renal tubular dilation in kidneys of the pups; no effects on fertility or reproductive functions were noted. Glyphosate is somewhat unusual because the effects on pups occur at lower doses than do general systemic toxic effects. No general systemic toxic effects were noted at the highest dose tested (31 mg/kg/day) in a two-year rat-feeding study (USEP.A 1985d). In teratology studies no teratogenic effects were noted in rats at doses up to 1,000 mg/kg/day and in rabbits at doses up to 350 mg/kg/day.

Page 51, left column, paragraph 3, line 6. The "5 to 1 mg/kg" has been changed to "5 to 10 mg/kg".

Page 51, Table B-3, Fetotoxicity NOEL in mg/kg/day column. 50 mg/kg/day of Glyphosate has been changed to 10.

Page 52, right column, paragraph 2. This paragraph has been deleted. This paragraph was taken out of context from the Region 1 Health Risk Analysis.

Appendix G

Page 71, Sediment and Detrilus. This section has been retitled: Runoff/Degradation (primary reference is USDA Pesticides Background Statement, Vol. I, Herbicides, 1984). After line 2, the rest of the lines in this section were deleted and replaced with the following paragraphs:

> In studies of Picloram injection into a stream system, Johnson and Warskow (1980) found that the highest recovery of injected picloram was located .25 miles downstream from the point of injection. At a point 1 mile downstream, less than 5% of the injection concentration was found in water samples.
>
> Neary et al. (1979) monitored streamflow from a 10-ac watershed for picloram residues following application of Tordon 10KR pellets at a rate of 4.5 lb. AI/A for site preparation. Picloram was applied in mid-May and two pulses of residues were detected in watershed outflow; a 3 ppb pulse in early June following precipitation and a maximum 8 ppb pulse in early July (no precipitation). No further residues were detected (reported through October) at detection limits of 1 ppb although there were relatively heavy rains in early August.
>
> Photodegradation of picloram, which has been demonstrated by some compound (National Research Council of Canada 1974; Gear et al. 1982; and Johnsen and Warskow 1980). The major photodegradation pathway in the presence of sunlight or ultraviolet light is dechlorination (Gear et al. 1982).
>
> Johnsen and Warskow (1980) found that sunlight decomposed 57 percent of picloram in containers after less than 9 hours of exposure, although in natural soil environments picloram would not be directly exposed to sunlight and thus would not be photodegraded so rapidly.
>
> Levels in farm ponds adjacent to plots treated with picloram at 1 lb./acre have reached 1 ppm (Haas et al. 1971 in National Research Council of Canada 1974). However, these levels decreased to less than 10 ppb within 100 days primarily due to dilution and photodegradation of picloram.

Appendix H

Page 72. The following plants have been added to the the Unique Plants list:

Scientific Name	Common Name	Location
Antennaria aromatica	no common name	Montana
Erigonum lagopus	no common name	Montana (Pryor Mts)
Shoshonea pulvinata	no common name	Montana (Absaroka Mts)

Appendix I

Page 74, Vegetative Type, District-Sheyenne. The 1985 inventoried noxious weed areas for leafy spurge is 5241 acres.

Page 74, Vegetative Type, District-Denbigh Experimental Forest. The 1985 inventoried noxweed acres were: leafy spurge - 200 acres and not 100 acres as stated.

Page 74, Vegetative Type, District-Beartooth. The 1985 inventoried noxious weed acres for spotted knapweed is 108.

Page 74, Vegetative Type, District-Ashland. The 1985 inventoried noxious weed areas for spotted knapweed is 510 and Canada thistle is 33.

Page 74, Vegetative Type, District-McKenzie. The 1985 inventoried noxious weed acres for leafy spurge is 141.

Glossary

Page 79. Before ADSORPTION the following definitions were added:

ACTIVE INGREDIENT (AI): The chemical in a herbicide that is primarily responsible for its phytotoxic or herbicidal action.

ACUTE TOXICITY: The quality or potential of a substance to cause injury or illness shortly after exposure to a relatively large dose.

Page 79. The definition of ANIMAL UNIT MONTH (AUM) now reads:

ANIMAL UNIT MONTH (AUM): The amount of forage needed to sustain one cow for 1 month.

Page 79. Between AUTHORIZED OFFICER and BATHOLITH the following definition was added:

AVERAGE DAILY INTAKE (ADI): The maximum dose of a substance that is anticipated to be without lifetime risk to humans when taken daily.

References

Page 85, left column. After Ashton the following reference has been added:

Bjugstad, Ardell J.; Francis, Richard; Skimmer, Paul. 1983. Leafy Spurge - a Potential Conflict With Woody Plants on the Northern High Plains. Proceedings Forestry Committee Great Plains Ag. Council - 1983 Annual Meeting, 7/11-7/14, Billings MT. 187 pp.

Page 85, right column. After Ghassemi the following reference has been added:

Gear, J.R., J.G. Michel and R. Grover, 1982. "Photochemical Degradation of Picloram." Pestic. Sci. 13:189-194.

Page 85, Right column. After Isaacson the following reference has been added:

Johnsen, T.N. Jr. and W.L. Warskow, 1980. "Picloram Dissipation in a Small Southwestern Stream". Weed Sci. 28:(5):612-615.

Page 85, right column. After Lym the following reference has been added:

Neary, D.G., J.E. Douglass and W. Fox, 1979. "Low Picloram Concentrations in Streamflow Resulting from Forest Application of Tordon IOK." Proc. South. Weed Sci. Soc. 32:182-197.

Page 86, left column. After Monsanto Company. 1982. the following reference was added:

Montana State University. Aug. 1984. Leafy Spurge News. Issue #3, Volume V. Plant and Soil Science Department. MSU.

Page 86, right column. After Sikka, H.C., the following reference was added:

Sonder, Leslie. 1969. Leafy Spurge. Leaflet #174. Cooperative Extension Service, Montana State University.